LBT-D505/D505CD/D505CDM/D505M

SERVICE MANUAL

AEP Model
LBT-D505/D505M
E Model
UK Model
LBT-D505CD/D505CDM
Australian Model
LBT-D505M

These systems are composed of following models.
As for the service manual, it is issued for each component model, then, please refer to it.

COMPONENT MODEL NAME FOR THESE SYSTEM

	LBT-D505	LBT-D505CD		LBT-D505CDM		LBT-D505M
	AEP, G, IT	UK	E3, EA	E2	UK	AEP, AUS
AMPLIFIER	TA-D505					
CASSETTE DECK	TC-D505					
TUNER	ST-D505					
CD PLAYER	CDP-M42			—	—	—
CD CHANGER	—	—	—	CDP-C312M		
TURNTABLE SYSTEM	PS-D705	PS-LX47P	PS-D705	PS-D705P	PS-LX47P	PS-D705
SPEAKER SYSTEM	SS-A505	SS-A505E	SS-D505AV	SS-D505AV	SS-A505E	SS-A505

Note: WG: West Germany model
IT: Italian model
EA: Saudi Arabia model
AUS: Australian model

STEREO COMPONENT SYSTEM

SONY®

PARTS LIST

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-465-718-11	REMOTE COMMANDER (Include ※1) (RM-S505)
1-501-369-11	ANTENNA (AEP, UK, IT)
1-501-374-11	ANTENNA, LOOP
1-556-650-00	CORD, SPEAKER (E, EA, AUS)
1-574-265-11	CORD (WITH CONNECTOR) (3-3)
1-590-822-11	CORD (WITH CONNECTOR) (3-15-15)
1-590-823-11	CORD (WITH CONNECTOR) (3-11-11)

※1. 3-707-584-11 COVER BATTERY

* 4-934-859-01	CUSHION (TA)
* 3-350-154-01	CUSHION (TC)
* 4-944-040-01	CUSHION (CDP-C311M: FRONT)
* 4-944-041-01	CUSHION (CDP-C311M: REAR)
* 4-922-998-01	CUSHION (CDP-M42: AEP, AUS)
* 4-929-563-01	CUSHION (CDP-M42: E, EA)
* 4-929-563-01	CUSHION (ST)
* 4-944-749-01	CUSHION (PS-D705: FRONT)
* 4-944-750-01	CUSHION (PS-D705: REAR)

Part No.	Description
3-753-081-11	MANUAL, INSTRUCTION (ENGLISH, F, E, P) (AEP Model)
3-753-081-41	MANUAL, INSTRUCTION (D, NL, S, I) (AEP, G, IT Model)
3-753-081-51	MANUAL, INSTRUCTION (ENGLISH) (UK Model)
3-753-081-61	MANUAL, INSTRUCTION (ENGLISH, F, E RC) (E, EA, AUS Model)

F : FRENCH P : PORTUGUESE
D : GERMAN E : SPANISH
I : ITALIAN S : SWEDISH
NL : DUTCH (HOLLAND) RC : CHINESE

* 4-944-959-01	INDIVIDUAL CARTON (D505: AEP) (L506 W424 H393)
* 4-944-960-01	INDIVIDUAL CARTON (D505M: AEP, AUS) (L506 W424 H393)
* 4-944-961-01	INDIVIDUAL CARTON (D505: AEP, G, IT) (L424 W385 H393)
* 4-944-962-01	INDIVIDUAL CARTON (D505M: AEP) (L424 W385 H393)
* 4-944-963-01	INDIVIDUAL CARTON (D505CD: E, EA)
* 4-944-964-01	INDIVIDUAL CARTON (D505CDM: E)
* 4-944-965-01	INDIVIDUAL CARTON (D505CD: UK)
* 4-944-966-01	INDIVIDUAL CARTON (D505CDM: UK)

9-956-316-11

Sony Corporation
Audio Group

English
91B0967-1
Printed in Japan
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Published by Customer Relations and Service Group

TA-D505

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model

SPECIFICATIONS

Continuous RMS power output
60 W + 60 W
(6 ohms, at 1 kHz, 5% THD)
50 W + 50 W
(6 ohms, DIN, 1 kHz)
Music power output 90 W + 90 W
(6 ohms, at 1 kHz, 10% THD)

Input	Jack type	Sensitivity	Impedance
PHONO (MM)	Phono	3.3 mV	47 kohms
VIDEO1	Phono	245 mV	47 kohms
VIDEO2	Phono	245 mV	47 kohms
CD	Phono	245 mV	47 kohms
MIC	Phone	1,6 mV	10 kohms

Output	Jack type	Voltage	Impedance
VIDEO1	Phono	200 mV	2 kohms
SURROUND SPEAKER	Phono	Accepts speakers of 16 ohms	
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more	

Frequency response	15 Hz to 50 kHz $^{+0}_{-3}$ dB
Power requirements	220-230 V AC, 50/60 Hz
Power consumption	150 W
AC outlet	1 unswitched, 100 W max.
Weight	Approx. 8 kg (17 lbs 11 oz)
Dimensions	Approx. 355 × 132.5 × 320 mm (w/h/d, including projections) ($14 \times 5\,^1/_4 \times 12\,^5/_8$ inches)

Design and specifications subject to change without notice.

Note
This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

STEREO AMPLIFIER

SONY®

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

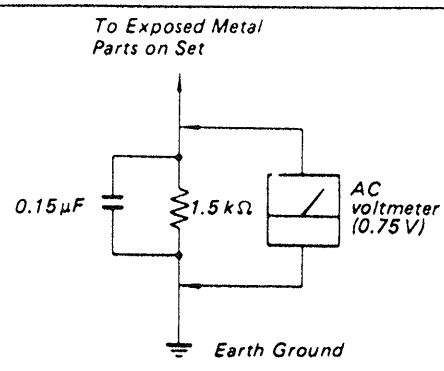

Fig. A. Using an AC voltmeter to check AC leakage.

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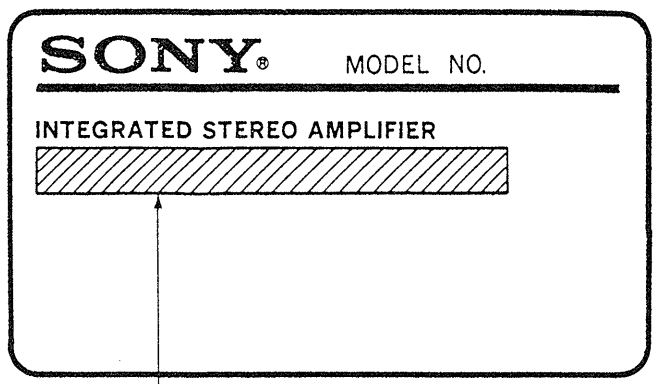
MODEL IDENTIFICATION
—Specification Label—



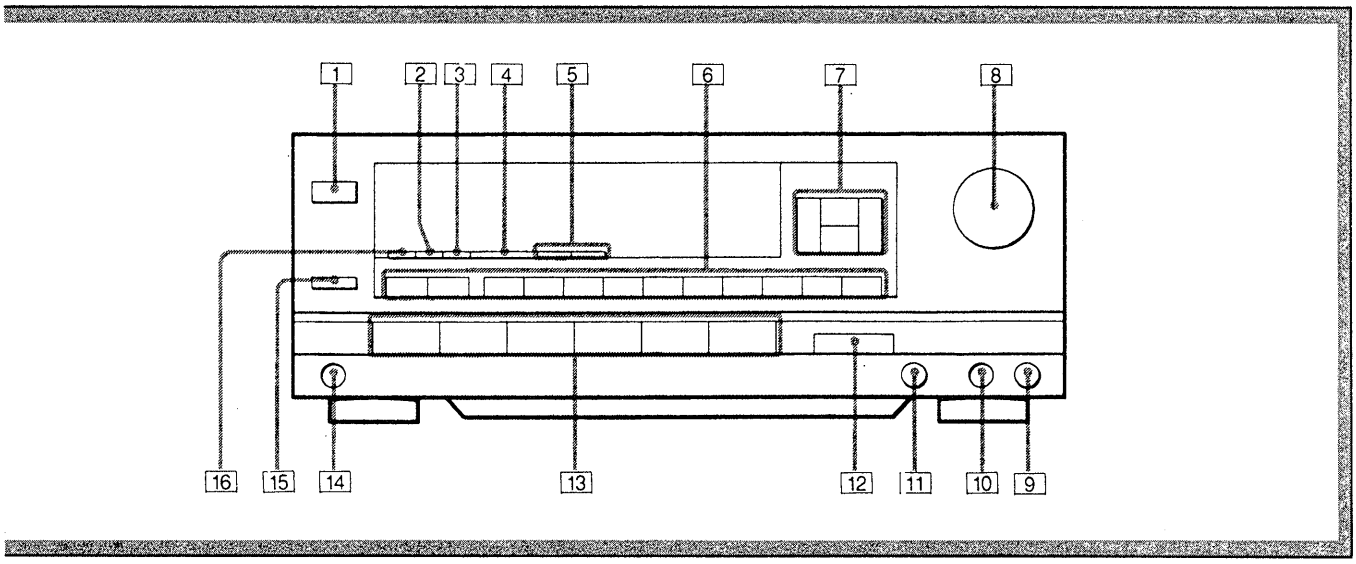
AEP, GERMANY, ITALIAN model: AC: 220V~ 50/60Hz
UK model: AC: 240V~ 50/60Hz
E, SAUDI ARABIA,
AUSTRALIAN model: AC: 120/220/240V~ 50/60Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL

This section is extracted from instruction manual.



Amplifier

1. POWER switch ⑩
2. FLAT button ㊹
3. REVERSE button ㊷
4. DBFB button ⑫
5. SURROUND (MODE/LEVEL) buttons ㊳
6. Buttons for storing and recalling equalization effects ㊶
7. CURSOR CONTROL ㊹
8. VOLUME control ⑫
9. MIC (microphone) LEVEL control ㊱
10. MIC (microphone) jack ㊱
11. BALANCE control ⑫
12. EFFECT button ㊳
13. Function selectors
14. HEADPHONES jack
15. PROGRAM FUNCTION button (only for the system used with CDP-M42) ㊾
16. DISPLAY button ㊵

SECTION 2
DIAGRAMS

2-1. IC PIN FUNCTION

IC708 SYSTEM CONTROLLER (μPD75212ACW-281)

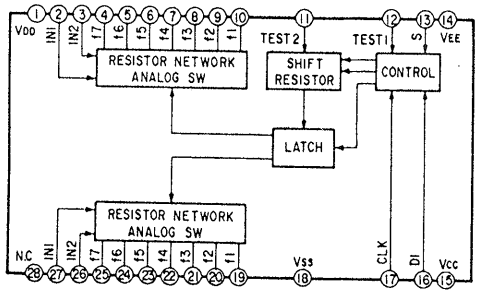
The IC708 system controller controls audio/video signal selection, switching of DBFB, graphic equalizer and surround, volume adjustment, FL tube display, key input, and input/output of audio bus.

Pin No.	Pin Name	I/O	Function
1	S3	O	FL tube segment & key scan output
2	S2	O	FL tube segment & key scan output
3	S1	O	FL tube segment & key scan output
4	S0	O	FL tube segment & key scan output
5	AC OUT	I	Power OFF & recovery detection input
6	SCK	I	Function mode switching. "L":CDP-M42, "H":CDP-C312M
7	MUTE	I	Mute control input.connected to the POWER SW on CD "H" or "OPEN" = MUTE
8	CONNECT	I	Systen connection check input. "CONNECT" blinks on FL tube if "H" or "OPEN".
9	AU BUS IN	I	Audio bus input
10	RY IN	I	Relay (RY601) control input
11	VOL ITI	I	Volume (RV702) position detection input
12	SIGNAL	I	Signal level detection input
13	VIDEO	O	Video selection output. "L":VIDEO 1, "H":VIDEO 2
14	KARAOKE	O	KARAOKE mode control output. "L":KARAOKE mode
15	VOL-UP	O	Volume (RV702) up output
16	VOL-DWN	O	Volume (RV702) down output
17	CLOCK 0	O	Outputs serial data transfer clock to the IC701, 705 (FL tube display), and IC401 (graphic equalizer electronic volume).
18	CLOCK 1	O	Outputs serial data transfer clock to the IC351, 701 (selector, surround control).
19	DATA	O	Outputs serial data output
20	MUTE 2	O	Muting output
21	KI 0	I	Key scan input
22	KI 1	I	Key scan input
23	KI 2	I	Key scan input
24	KI 3	I	Key scan input
25	PGMF-L	O	PGMF mode LED output
26	DBFB-L1	O	DBFB control 1 output
27	DBFB-L2	O	DBFB control 2 output
28	AU BUS OUT	O	Audio bus output
29	PPO	O	PWM output
30	X1	I	Clock (4.19MHz) input
31	X2	I	Clock input
32	Vss	—	GND
33	XT1	I	Not used (always GND)
34	XT2	—	Not used
35	VOLL	O	Volume LED output
36	EFFECT L	O	Effect LED output
37	V1 VL	O	Video 1 video LED output
38	V2 VL	O	Video 2 video LED output
39	RESET	I	Reset input
40	T0	O	FL tube digit output
41	T1	O	FL tube digit output
42	T2	O	FL tube digit output
43	T3	O	FL tube digit output
44	T4	O	FL tube digit output
45	T5	O	FL tube digit output
46	T6	O	FL tube digit output
47	T7	O	FL tube digit output
48	T8	O	FL tube digit output
49	T9	O	FL tube digit output
50	T10	O	FL tube digit output
51	T11	O	FL tube digit output
52	S13	O	FL tube segment & key scan output
53	S12	O	FL tube segment & key scan output
54	S11	O	FL tube segment & key scan output
55	S10	O	FL tube segment & key scan output
56	V_{LOAD}	I	Power for built-in FL tube controller (−28V)
57	V_{REF}	I	Power for built-in FL tube predriver (−4V)
58	S9	O	FL tube segment & key scan output
59	S8	O	FL tube segment & key scan output
60	S7	O	FL tube segment & key scan output
61	S6	O	FL tube segment & key scan output
62	S5	O	FL tube segment & key scan output
63	S4	O	FL tube segment & key scan output
64	V_{DD}	—	Power supply (+5V)

	OFF	1	2	3
DBFB 1	H	L	H	L
DBFB 2	H	H	L	L

● IC Block Diagrams

IC401 LC7522K



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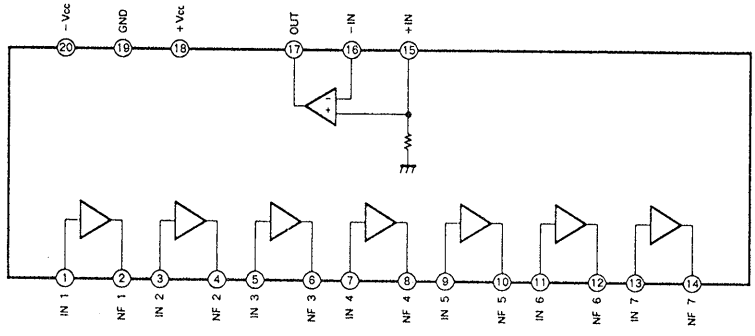

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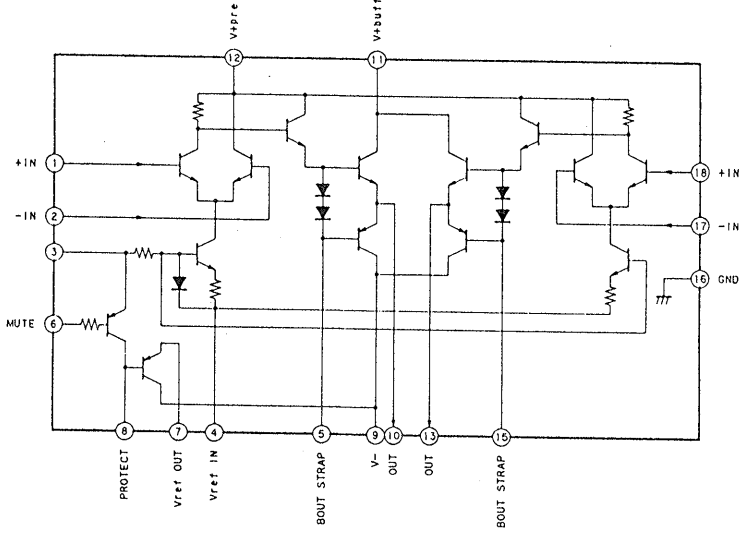
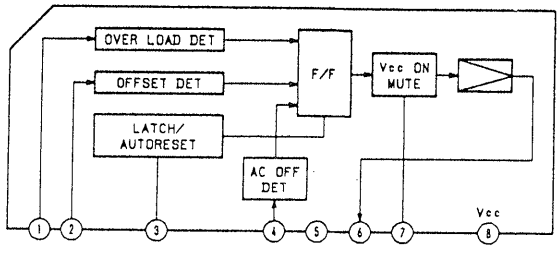
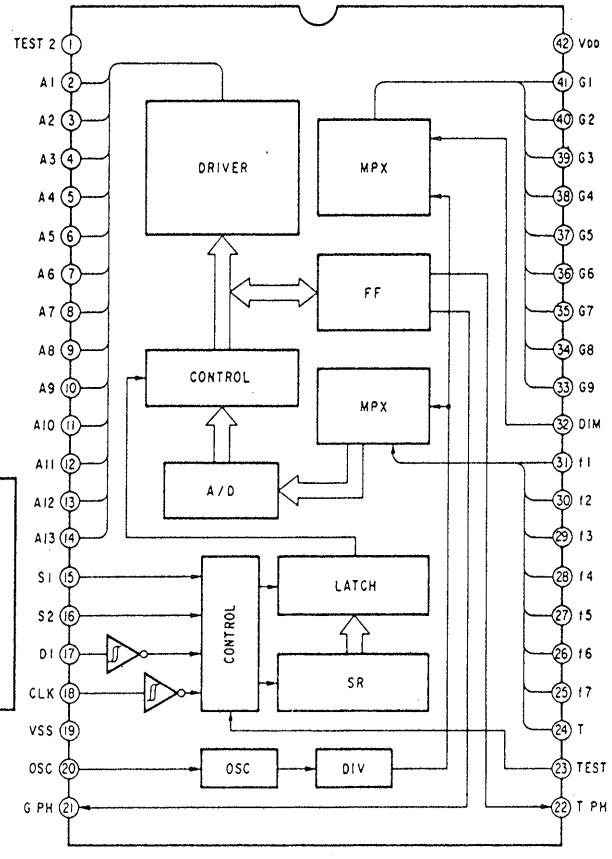


IC602 μPC1237HA



IC701 LC7565K



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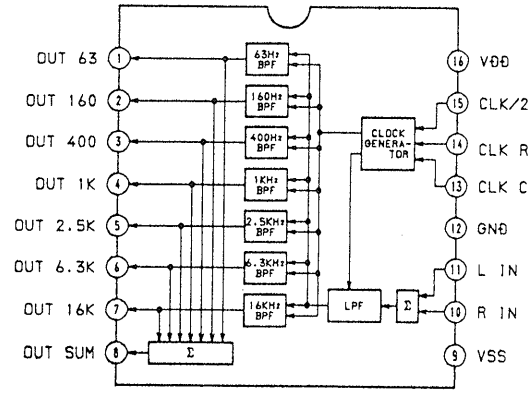

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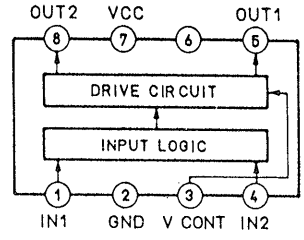
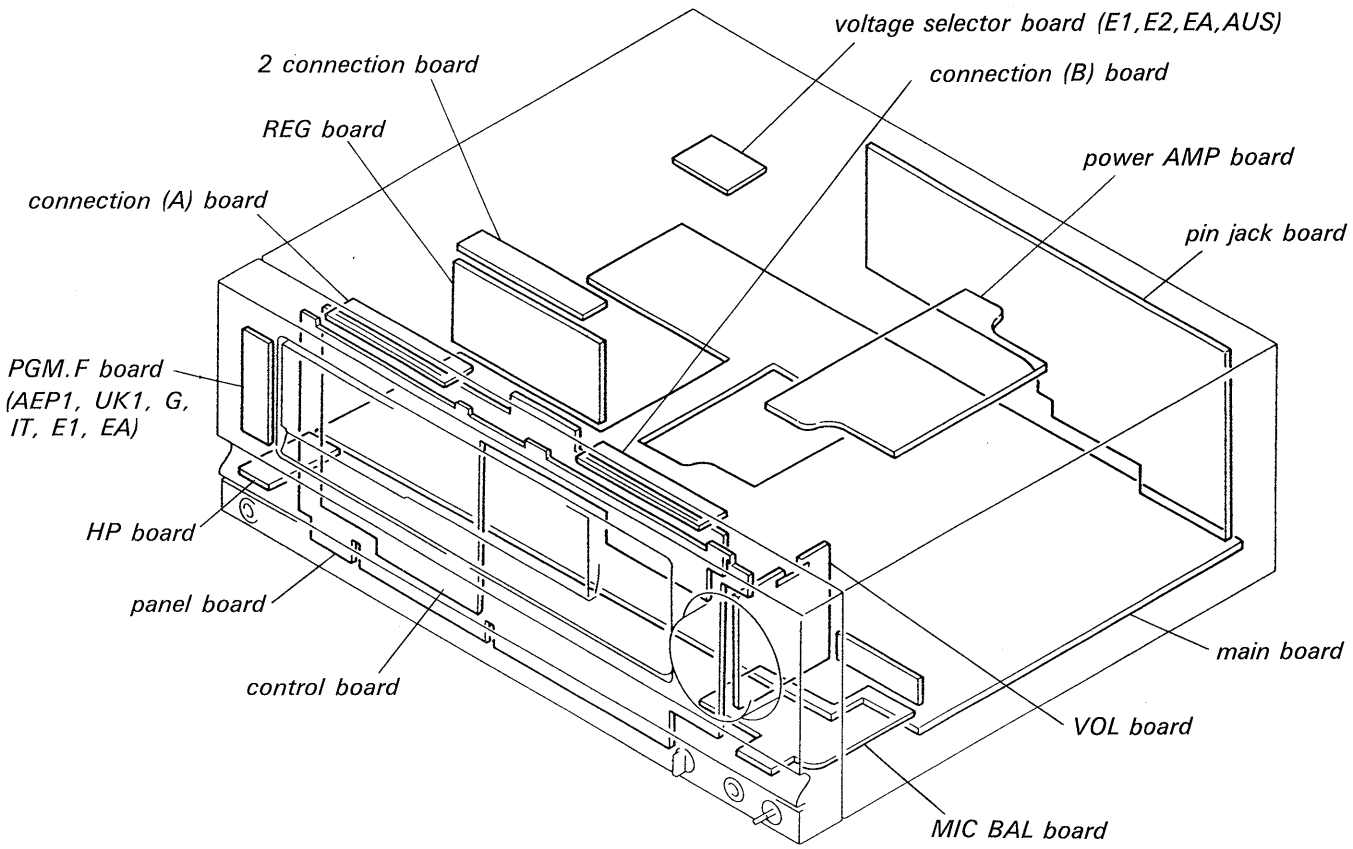


2-2. CIRCUIT BOARDS LOCATION



UZ-4.7BSA

●Semiconductor Lead Layouts

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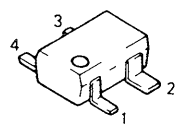

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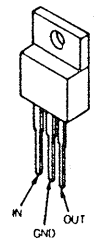

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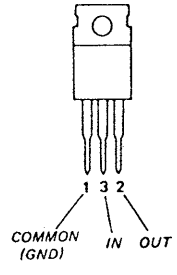

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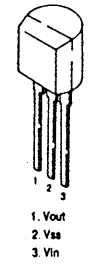

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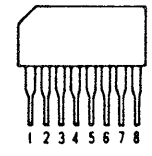

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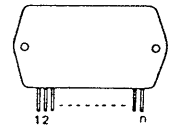

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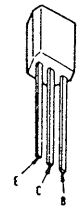

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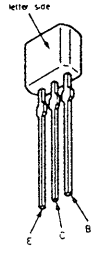

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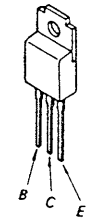

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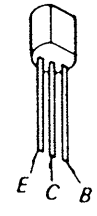

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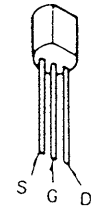

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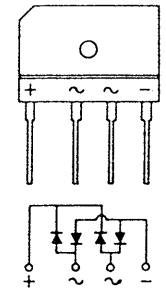

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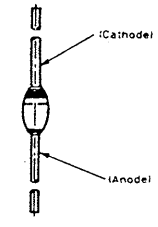

UZP-7.5B
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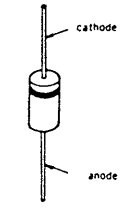
10E2N



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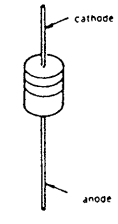

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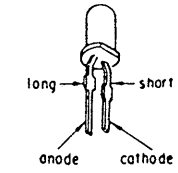
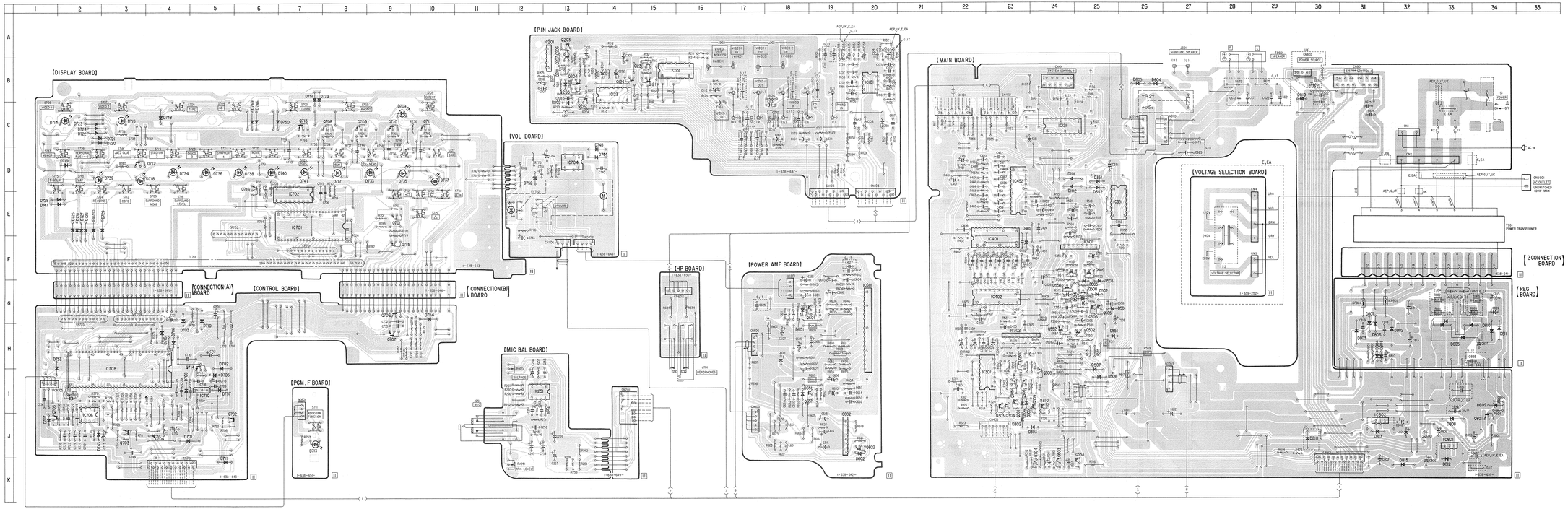


●SEMICONDUCTOR LOCATION

Ref.No.	Location	Ref.No.	Location	Ref.No.	Location
D101	D-24	D752	D-12	Q559	F-24
D102	E-24	D753	H-1	Q601	G-19
D201	B-13	D754	G-10	Q602	J-20
D202	C-13	D757	I-5	Q651	I-18
D302	J-23	D801	H-31	Q701	E-9
D303	J-23	D802	H-32	Q702	J-5
D304	J-23	D803	H-31	Q703	J-3
D305	J-23	D804	H-31	Q704	J-24
D351	D-25	D805	H-33	Q705	J-1
D352	E-25	D806	H-31	Q706	G-9
D402	F-23	D807	H-31	Q707	H-9
D501	G-25	D808	J-33	Q708	C-8
D502	G-25	D809	J-34	Q709	C-8
D503	G-25	D810	H-34	Q710	C-9
D504	G-24	D811	H-34	Q711	G-10
D505	G-25	D812	K-33	Q712	D-3
D506	I-25	D813	J-31	Q713	C-7
D507	H-25	D815	K-32	Q714	H-5
D551	H-25	D818	J-30	Q715	F-9
D601	G-18	D819	B-30	Q716	D-8
D602	J-20			Q801	J-34
D604	B-26	IC101	B-20		
D605	B-26	IC121	C-24		
D651	I-18	IC122	B-15		
D701	J-4	IC123	B-14		
D702	I-5	IC201	A-13		
D703	H-4	IC251	I-12		
D704	J-4	IC301	I-22		
D705	I-5	IC302	H-23		
D706	H-4	IC351	E-25		
D707	J-1	IC401	F-23		
D708	I-4	IC402	G-23		
D709	C-9	IC452	D-23		
D710	G-5	IC501	F-25		
D711	K-5	IC601	G-20		
D713	J-7	IC602	J-19		
D714	C-7	IC701	E-7		
D715	C-3	IC702	E-7		
D716	H-4	IC704	H-13		
D717	D-8	IC706	J-2		
D718	D-3	IC708	H-3		
D719	D-3	IC710	I-5		
D720	C-2	IC801	J-33		
D721	C-2	IC802	J-31		
D722	C-2				
D723	C-2	Q121	B-15		
D724	C-2	Q123	B-15		
D725	E-2	Q124	B-14		
D726	E-2	Q201	B-13		
D727	E-2	Q202	C-13		
D728	E-2	Q203	A-13		
D729	E-2	Q204	B-13		
D730	E-2	Q205	B-13		
D731	E-2	Q206	A-13		
D732	B-7	Q207	B-13		
D733	D-7	Q302	J-23		
D734	D-4	Q303	J-23		
D735	D-5	Q304	J-23		
D736	D-5	Q305	I-23		
D737	D-10	Q306	I-23		
D738	D-6	Q307	H-23		
D739	D-3	Q308	I-24		
D740	D-5	Q309	I-24		
D741	D-7	Q310	I-24		
D743	J-2	Q502	H-25		
D744	D-14	Q503	J-24		
D745	D-14	Q505	G-25		
D746	C-6	Q506	G-25		
D747	E-2	Q508	G-25		
D748	C-4	Q509	F-25		
D749	C-6	Q552	H-24		
D750	C-7	Q553	K-25		
D751	B-7	Q558	G-24		

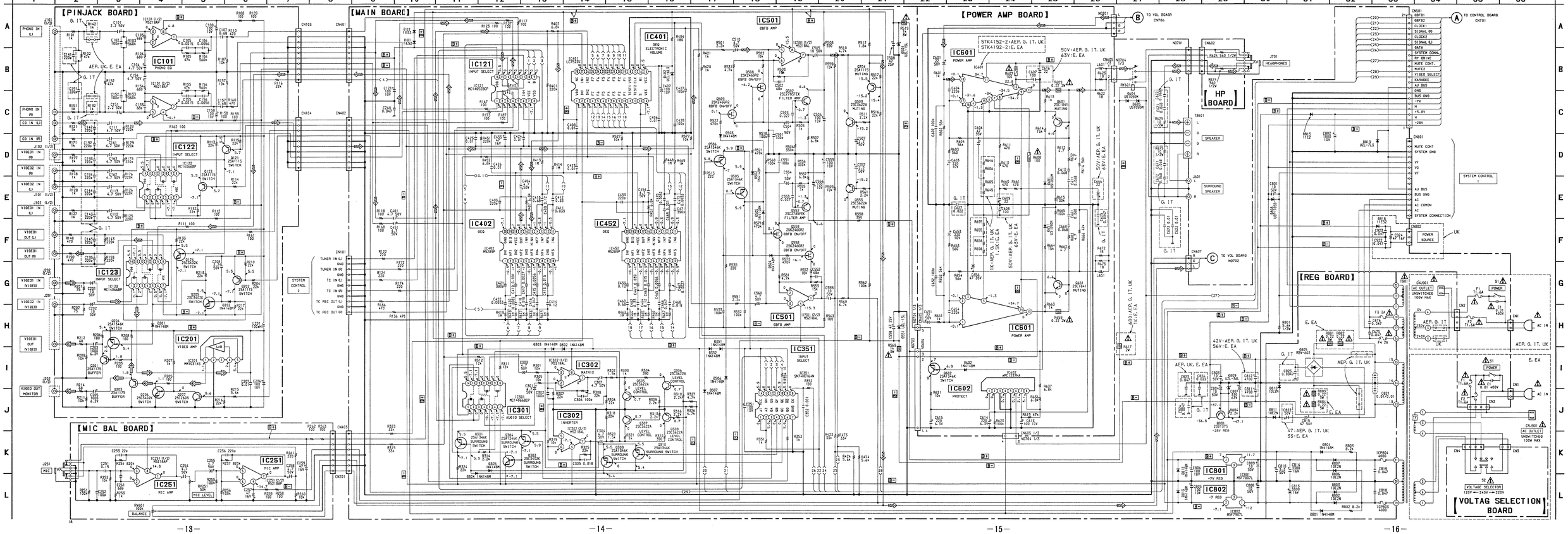
Note :
• ⟵ : parts extracted from the component side.

2-3. PRINTED WIRING BOARDS

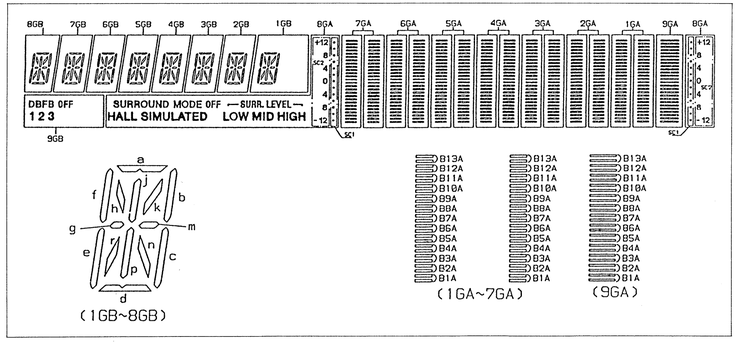


2-4. SCHEMATIC DIAGRAM —Audio Section—

●See page 17 for note.



FL701

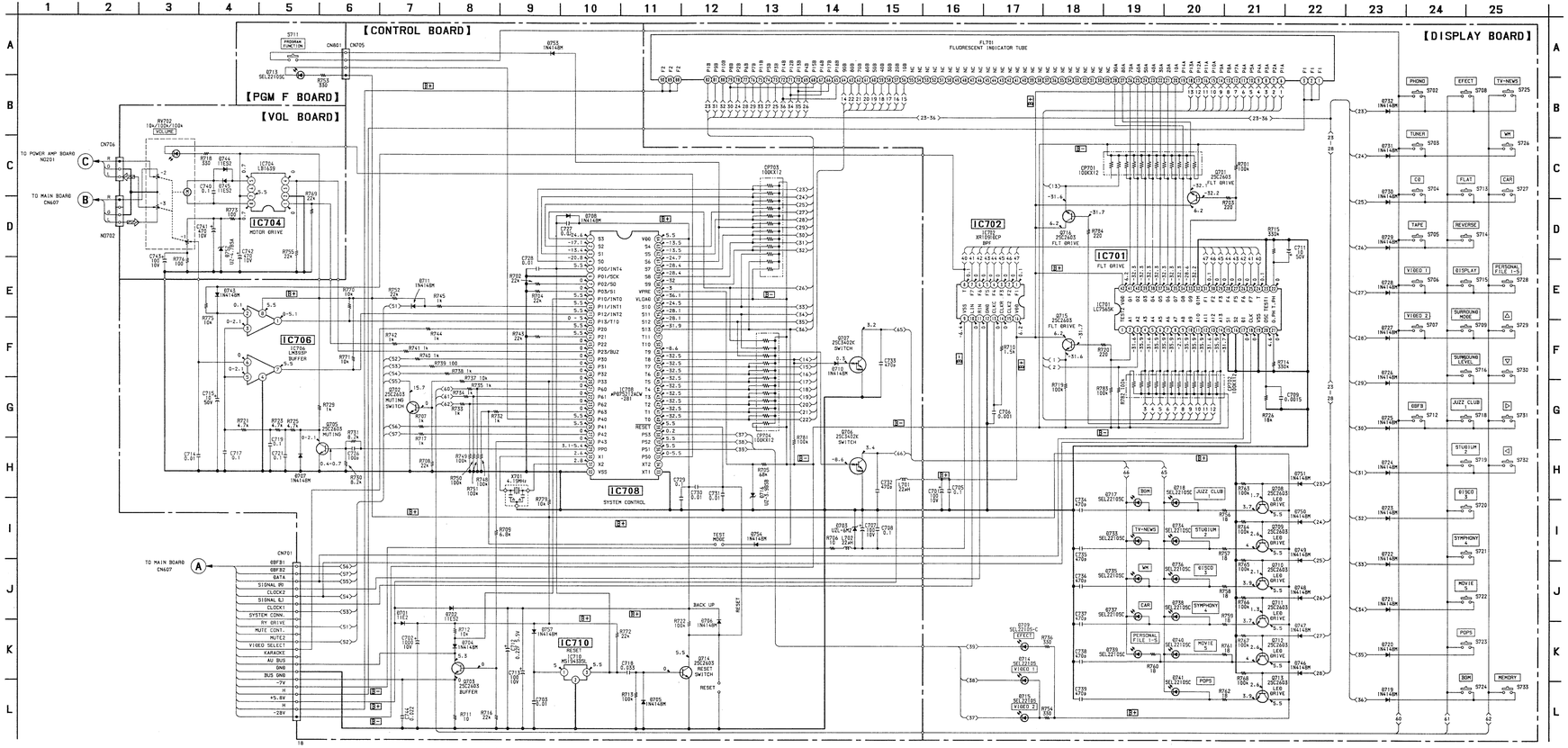

8GB 7GB 6GB 5GB 4GB 3GB 2GB 1GB 8GA 7GA 6GA 5GA 4GA 3GA 2GA 1GA 9GA 8GA
DBFB OFF
123
SURROUND MODE OFF — SURR. LEVEL —
HALL SIMULATED LOW MID HIGH
+12 8 4 0 -4 -8 -12
SC1
SC2
9GB
a b c d e f g h k m p
(1GB~8GB)
B13A B12A B11A B10A B9A B8A B7A B6A B5A B4A B3A B2A B1A
(1GA~7GA)
B13A B12A B11A B10A B9A B8A B7A B6A B5A B4A B3A B2A B1A
(9GA)

Note :
- All capacitors are in μF unless otherwise noted. pF : μμF
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : indicates tolerance.
- : nonflammable resistor.
- : fusible resistor.
- : B+Line
- : B−Line
- : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM(Input impedance 1.0MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path. : CD : TV (PICTURE)

G : Germany
IT : Italian
EA : Saudi Arabia
AUS : Australian

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

2-5. SCHEMATIC DIAGRAM—Control Section—



SECTION 3
EXPLODED VIEWS

NOTE:
- −XX, −X mean standardized parts, so they may have some differences from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts

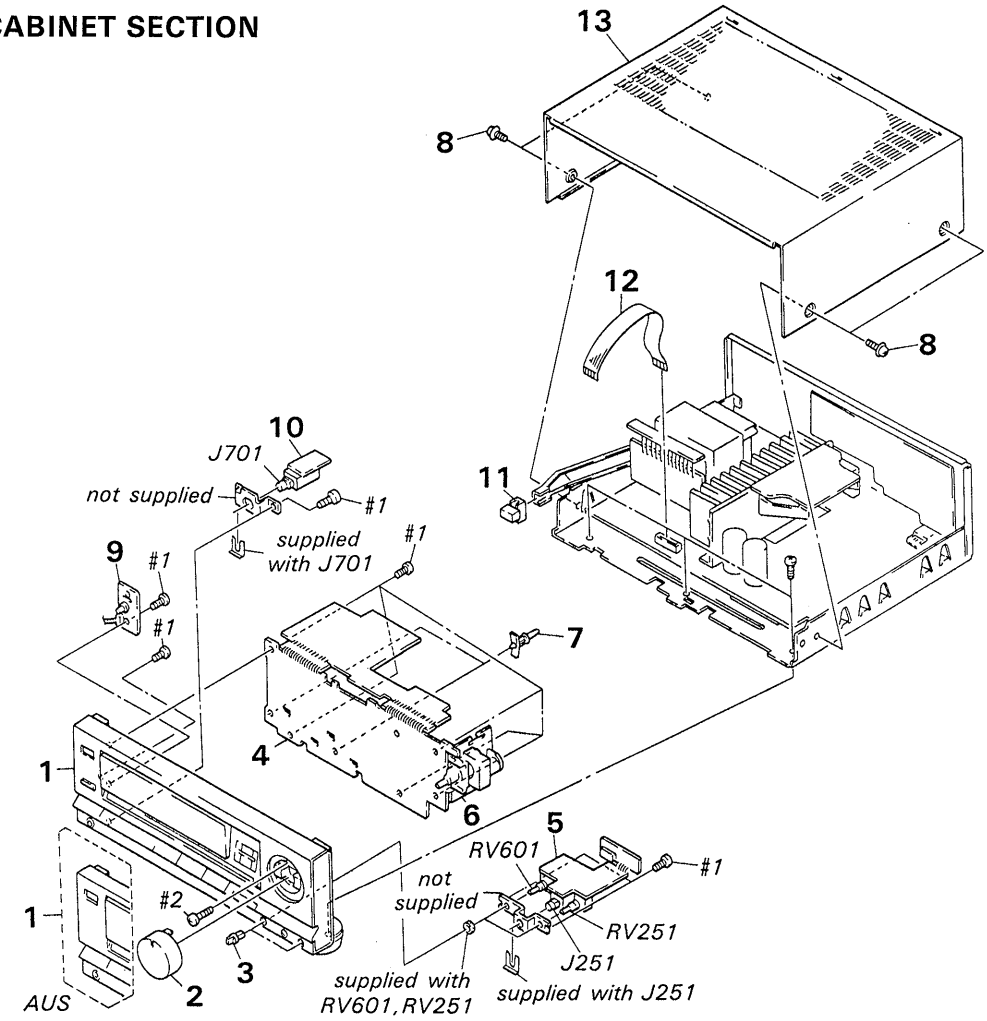
Example:
KNOB, BALANCE(WHITE)...(WHT)
↑ ↑
Part's Color Cabinet's Color

- Hardware (#mark) list is given in the last of this parts list.

G : Germany
IT : Italian
EA : Saudi Arabia
AUS : Australian

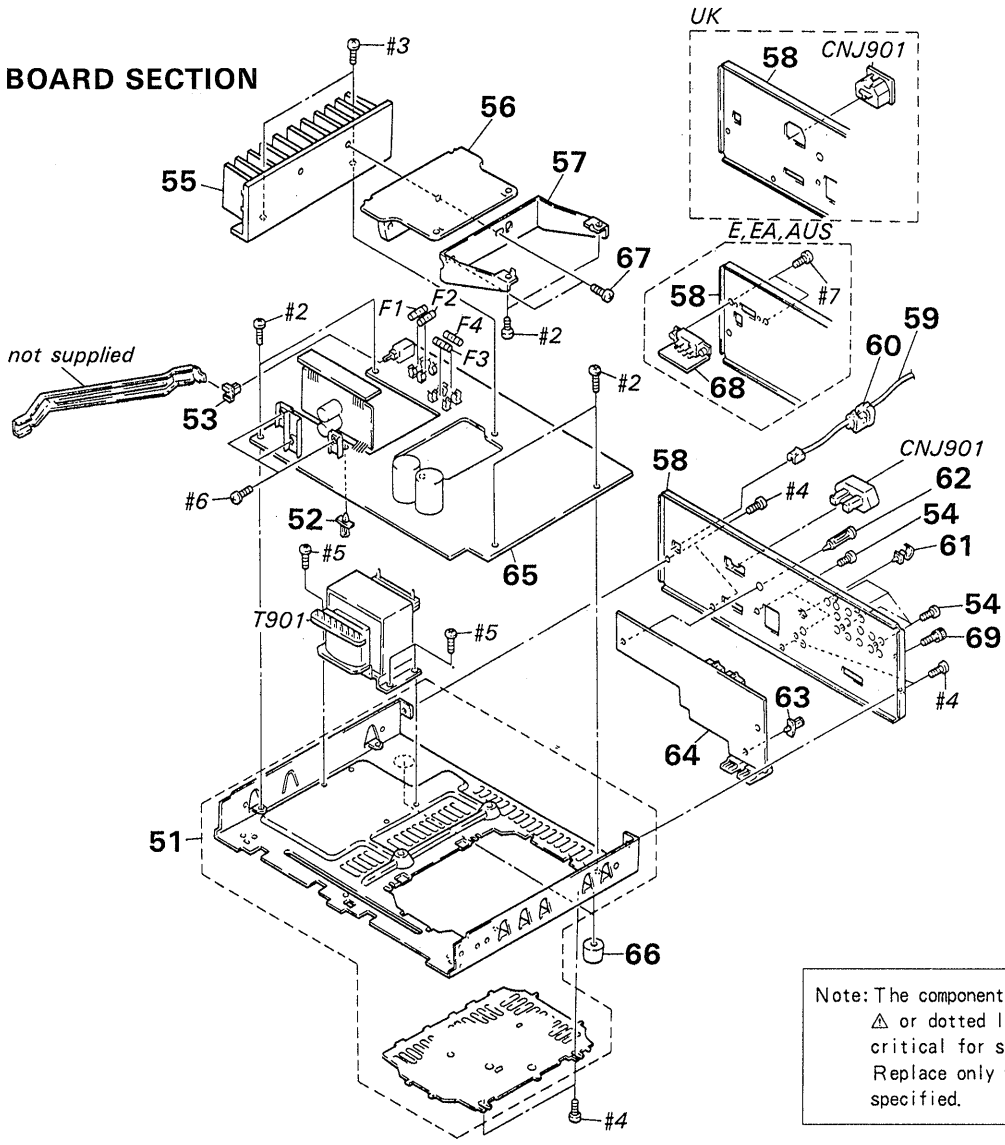
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

3-1. CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	X-4941-451-1	PANEL ASSY, FRONT (IT)	
1	X-4941-449-1	PANEL ASSY, FRONT (AUS)	
1	X-4941-452-1	PANEL ASSY, FRONT (AEP, G, UK, E, EA)	
2	X-4941-136-1	KNOB ASSY, ROUND	
3	4-922-531-11	KNOB (A TYPE), VOL	
4	* A-4341-692-A	PANEL BOARD, COMPLETE (AEP, G, IT, UK, E, EA)	
4	* A-4341-704-A	PANEL BOARD, COMPLETE (AUS)	
5	* 1-638-649-11	MIC BAL BOARD	
6	* 1-638-648-11	VOL BOARD	
7	* 4-924-098-01	HOLDER, PC BOARD	
8	3-363-099-01	SCREW (CASE +3X8 TP2)	
9	* 1-638-651-11	PGM. F BOARD (EXCEPT AUS)	
10	* 1-638-650-11	HP BOARD	
11	4-942-061-01	BUTTON (P)	
12	1-590-243-11	WIRE, FLAT TYPE (21 CORE)	
13	* 4-939-803-91	CASE (AEP, G, IT, UK, E, EA, AUS)	
J251	1-507-854-00	JACK, LARGE TYPE (MIC)	
J701	1-507-854-00	JACK, LARGE TYPE (HEADPHONES)	
RV251	1-241-317-11	RES, VAR, CARBON 50K (MIC LEVEL)	
RV601	1-241-318-11	RES, VAR, CARBON 100K (BALANCE)	

3-2. MAIN BOARD SECTION



Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
51	* X-4917-246-1	CHASSIS ASSY	
52	4-944-316-11	HOLDER, PC BOARD	
53	4-866-342-00	JOINT (B), KNOB	
54	4-909-982-31	SCREW, TAPPING	
55	* 4-943-905-01	HEAT SINK	
56	* A-4341-699-A	POWER AMP BOARD, COMPLETE (AEP, UK)	
56	* A-4341-706-A	POWER AMP BOARD, COMPLETE (E, EA, AUS)	
56	* A-4341-702-A	POWER AMP BOARD, COMPLETE (G, IT)	
57	* 4-943-903-01	BRACKET	
58	* 4-943-906-21	PANEL (B3120), BACK (G)	
58	* 4-943-906-31	PANEL (B3120), BACK (UK)	
58	* 4-943-906-51	PANEL (B3120), BACK (E)	
58	* 4-943-906-61	PANEL (B3120), BACK (EA)	
58	* 4-943-906-71	PANEL (B3120), BACK (IT)	
58	* 4-943-906-81	PANEL (B3120), BACK (AUS)	
58	* 4-943-906-11	PANEL (B3120), BACK (AEP)	
59	⚠ 1-575-654-11	CORD, POWER (AEP, G, IT, EA)	
59	⚠ 1-575-656-11	CORD, POWER (E, AUS)	
59	⚠ 1-575-669-21	CORD, POWER (UK)	
60	* 3-703-571-11	BUSHING (S) (4516), CORD (E, EA, AUS)	
60	* 3-703-244-00	BUSHING (2104), CORD (AEP, G, IT, UK)	

Ref. No.	Part No.	Description	Remark
61	* 3-646-086-11	HOLDER, ROD	
62	* 4-912-181-21	SUPPORT, PC	
63	* 3-349-025-31	HOLDER, PC BOARD	
64	* A-4341-693-A	PIN JACK BOARD, COMPLETE (AEP, UK, E, EA, AUS)	
64	* A-4341-700-A	PIN JACK BOARD, COMPLETE (G, IT)	
65	* A-4341-698-A	MAIN BOARD, COMPLETE (AEP)	
65	* A-4341-701-A	MAIN BOARD, COMPLETE (G, IT)	
65	* A-4341-703-A	MAIN BOARD, COMPLETE (UK)	
65	* A-4341-705-A	MAIN BOARD, COMPLETE (AUS)	
65	* A-4341-796-A	MAIN BOARD, COMPLETE (E, EA)	
66	4-931-169-01	FOOT	
67	4-928-635-11	SCREW, +BV (2.6X16) TAPPING	
68	* 1-639-252-11	VOLTAGE SELECTOR BOARD (E, EA, AUS)	
69	3-706-165-00	SCREW	
CNJ901	⚠ 1-526-882-00	OUTLET, AC (E)	
CNJ901	⚠ 1-526-751-11	OUTLET, AC (UK)	
CNJ901	⚠ 1-526-794-11	OUTLET, AC (AEP, G, IT, EA, AUS)	
F1	⚠ 1-532-259-00	FUSE T1.6A	
F2	⚠ 1-532-259-00	FUSE T1.6A	
F3	⚠ 1-532-388-51	FUSE T2A	
F4	⚠ 1-532-388-51	FUSE T2A	
T901	⚠ 1-450-422-11	TRANSFOMER, POWER (E, EA, AUS)	
T901	⚠ 1-450-423-11	TRANSFOMER, POWER (AEP, G, IT, UK)	

SECTION 4
ELECTRICAL PARTS LIST

MAIN | POWER AMP | VOLTAGE SELECTOR

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- −XX, −X mean standardized parts, so they may have some differences from the original one.
- RESISTORS
  All resistors are in ohms

METAL : Metal-film resistor
METAL OXIDE : Metal Oxide-film resistor
F : nonflammable

- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA··· : μA···, uPA··· : μPA···,
  uPB··· : μPB···, uPC··· : μPC···,
  uPD··· : μPD···
- CAPACITORS
  uF : μF
- COILS
  uH : μH

G : Germany
IT : Italian
EA : Saudi Arabia
AUS : Australian

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref. No.	Part No.	Description			Remark
	* A-4341-698-A	MAIN BOARD, COMPLETE (AEP)			
	* A-4341-701-A	MAIN BOARD, COMPLETE (G, IT)			
	* A-4341-703-A	MAIN BOARD, COMPLETE (UK)			
	* A-4341-796-A	MAIN BOARD, COMPLETE (E, EA)			
		**********			
	* A-4341-699-A	POWER AMP BOARD, COMPLETE (AEP, UK)			
	* A-4341-702-A	POWER AMP BOARD, COMPLETE (G, IT)			
	* A-4341-706-A	POWER AMP BOARD, COMPLETE (E, EA, AUS)			
		**********			
	* 1-639-252-11	VOLTAGE SELECTOR BOARD (E, EA, AUS)			
		**********			
	* 1-533-213-31	HOLDER, FUSE			
	* 1-533-213-31	HOLDER, FUSE			
	* 3-309-144-21	HEAT SINK			
	* 4-942-204-01	PLATE, GROUND			
	7-682-548-04	SCREW +BVTT 3X8 (S)			
		< CAPACITOR >			
C1	⚠ 1-161-744-00	CERAMIC	0.01uF		400V
C121	1-124-994-11	ELECT	100uF	20%	10V
C260	1-136-161-00	FILM	0.047uF	5%	50V
C301	1-126-163-11	ELECT	0.68uF	20%	50V
C302	1-164-073-11	CERAMIC	100PF	10%	50V
C303	1-126-163-11	ELECT	0.68uF	20%	50V
C304	1-126-163-11	ELECT	0.68uF	20%	50V
C305	1-136-156-00	FILM	0.018uF	5%	50V
C306	1-164-073-11	CERAMIC	100PF	10%	50V
C307	1-126-163-11	ELECT	0.68uF	20%	50V
C351	1-124-994-11	ELECT	100uF	20%	10V
C352	1-162-294-31	CERAMIC	0.001uF	10%	50V
C401	1-126-163-11	ELECT	0.68uF	20%	50V
C403	1-164-077-11	CERAMIC	220PF	10%	50V
C404	1-126-163-11	ELECT	0.68uF	20%	50V
C406	1-161-379-00	CERAMIC	0.01uF	20%	25V
C407	1-124-994-11	ELECT	100uF	20%	10V
C408	1-161-379-00	CERAMIC	0.01uF	20%	25V
C409	1-136-166-00	FILM	0.12uF	5%	50V
C410	1-136-175-00	FILM	0.68uF	5%	50V
C411	1-136-160-00	FILM	0.039uF	5%	50V
C412	1-136-171-00	FILM	0.33uF	5%	50V
C413	1-136-155-00	FILM	0.015uF	5%	50V
C414	1-136-166-00	FILM	0.12uF	5%	50V
C415	1-130-480-00	MYLAR	0.0056uF	5%	50V
C416	1-136-161-00	FILM	0.047uF	5%	50V
C417	1-106-353-00	MYLAR	0.0027uF	5%	50V
C418	1-136-156-00	FILM	0.018uF	5%	50V
C419	1-106-343-00	MYLAR	1000PF	5%	200V
C420	1-130-482-00	MYLAR	0.0082uF	5%	50V
C421	1-164-080-11	CERAMIC	390PF	10%	50V
C422	1-130-477-00	MYLAR	0.0033uF	5%	50V
C423	1-161-379-00	CERAMIC	0.01uF	20%	25V
C424	1-161-379-00	CERAMIC	0.01uF	20%	25V
C425	1-161-379-00	CERAMIC	0.01uF	20%	25V
C426	1-161-379-00	CERAMIC	0.01uF	20%	25V
C427	1-162-282-31	CERAMIC	100PF	10%	50V
C428	1-162-282-31	CERAMIC	100PF	10%	50V
C451	1-126-163-11	ELECT	0.68uF	20%	50V
C453	1-164-077-11	CERAMIC	220PF	10%	50V
C454	1-126-163-11	ELECT	0.68uF	20%	50V
C455	1-126-022-11	ELECT	47uF	20%	16V
C459	1-136-166-00	FILM	0.12uF	5%	50V
C460	1-136-175-00	FILM	0.68uF	5%	50V
C461	1-136-160-00	FILM	0.039uF	5%	50V

MAIN | POWER AMP | VOLTAGE SELECTOR

Ref. No.	Part No.	Description				Remark
C462	1-136-171-00	FILM	0.33uF	5%	50V	
C463	1-136-155-00	FILM	0.015uF	5%	50V	
C464	1-136-166-00	FILM	0.12uF	5%	50V	
C465	1-130-480-00	MYLAR	0.0056uF	5%	50V	
C466	1-136-161-00	FILM	0.047uF	5%	50V	
C467	1-106-353-00	MYLAR	0.0027uF	5%	50V	
C468	1-136-156-00	FILM	0.018uF	5%	50V	
C469	1-106-343-00	MYLAR	1000PF	5%	200V	
C470	1-130-482-00	MYLAR	0.0082uF	5%	50V	
C471	1-164-080-11	CERAMIC	390PF	10%	50V	
C472	1-130-477-00	MYLAR	0.0033uF	5%	50V	
C501	1-164-073-11	CERAMIC	100PF	10%	50V	
C502	1-164-066-11	CERAMIC	68PF	5%	50V	
C503	1-136-158-00	FILM	0.027uF	5%	50V	
C504	1-126-301-11	ELECT	1uF	20%	50V	
C505	1-126-059-11	ELECT	10uF	20%	50V	
C506	1-124-994-11	ELECT	100uF	20%	10V	
C507	1-126-161-11	ELECT	2.2uF	20%	50V	
C508	1-124-910-11	ELECT	47uF	20%	50V	
C510	1-126-163-11	ELECT	0.68uF	20%	50V	
C551	1-164-073-11	CERAMIC	100PF	10%	50V	
C552	1-164-066-11	CERAMIC	68PF	5%	50V	
C553	1-136-158-00	FILM	0.027uF	5%	50V	
C554	1-126-301-11	ELECT	1uF	20%	50V	
C555	1-126-059-11	ELECT	10uF	20%	50V	
C556	1-124-994-11	ELECT	100uF	20%	10V	
C557	1-126-161-11	ELECT	2.2uF	20%	50V	
C558	1-124-910-11	ELECT	47uF	20%	50V	
C559	1-124-994-11	ELECT	100uF	20%	10V	
C560	1-126-163-11	ELECT	0.68uF	20%	50V	
C601	1-126-233-11	ELECT	22uF	20%	50V	
C602	1-110-335-11	MYLAR	100PF	5%	50V	
C603	1-126-101-11	ELECT	100uF	20%	16V	
C604	1-110-339-11	MYLAR	220PF	5%	50V	
C606	1-124-910-11	ELECT	47uF	20%	50V	
C607	1-124-122-11	ELECT	100uF	20%	50V	(AEP, G, IT, UK)
C607	1-124-572-11	ELECT	100uF	20%	63V	(E, EA)
C608	1-124-122-11	ELECT	100uF	20%	50V	(AEP, G, IT, UK)
C608	1-124-572-11	ELECT	100uF	20%	63V	(E, EA)
C609	1-124-916-11	ELECT	22uF	20%	63V	(E, EA)
C609	1-126-233-11	ELECT	22uF	20%	50V	(AEP, G, IT, UK)
C610	1-136-163-00	FILM	0.068uF	5%	50V	
C611	1-136-163-00	FILM	0.068uF	5%	50V	
C613	1-124-994-11	ELECT	100uF	20%	10V	
C614	1-124-587-11	ELECT	220uF	20%	6.3V	
C615	1-124-587-11	ELECT	220uF	20%	6.3V	

Ref. No.	Part No.	Description				Remark
C616	1-124-916-11	ELECT	22uF	20%	63V	(E, EA)
C616	1-126-233-11	ELECT	22uF	20%	50V	(AEP, G, IT, UK)
C621	1-136-163-00	FILM	0.068uF	5%	50V	(G, IT)
C622	1-136-163-00	FILM	0.068uF	5%	50V	(G, IT)
C623	1-161-379-00	CERAMIC	0.01uF	30%	25V	(G, IT)
C624	1-106-359-00	MYLAR	0.0047uF	5%	50V	(G, IT)
C627	1-136-157-00	FILM	0.022uF	5%	50V	(G, IT)
C651	1-126-233-11	ELECT	22uF	20%	50V	
C652	1-110-335-11	MYLAR	100PF	5%	50V	
C653	1-126-101-11	ELECT	100uF	20%	16V	
C654	1-110-339-11	MYLAR	220PF	5%	50V	
C656	1-124-910-11	ELECT	47uF	20%	50V	
C660	1-136-163-00	FILM	0.068uF	5%	50V	
C661	1-136-163-00	FILM	0.068uF	5%	50V	
C666	1-124-916-11	ELECT	22uF	20%	63V	(E, EA)
C666	1-126-233-11	ELECT	22uF	20%	50V	(AEP, G, IT, UK)
C675	1-161-021-11	CERAMIC	0.047uF	10%	25V	
C676	1-161-021-11	CERAMIC	0.047uF	10%	25V	
C671	1-136-163-00	FILM	0.068uF	5%	50V	(G, IT)
C672	1-136-163-00	FILM	0.068uF	5%	50V	(G, IT)
C673	1-161-379-00	CERAMIC	0.01uF	30%	25V	(G, IT)
C801	1-126-059-11	ELECT	10uF	20%	50V	
C802	1-124-473-11	ELECT	1000uF	20%	10V	
C803	1-126-059-11	ELECT	10uF	20%	50V	
C804	1-126-059-11	ELECT	10uF	20%	50V	
C805	1-124-994-11	ELECT	100uF	20%	10V	
C806	1-124-994-11	ELECT	100uF	20%	10V	
C808	1-126-059-11	ELECT	10uF	20%	50V	
C809	1-126-059-11	ELECT	10uF	20%	50V	
C810	1-126-162-11	ELECT	3.3uF	20%	50V	
C811	1-126-224-11	ELECT	4700uF	20%	42V	(AEP, G, IT, UK)
C811	1-126-258-11	ELECT	4700uF	20%	56V	(E, EA)
C812	1-126-224-11	ELECT	4700uF	20%	42V	(AEP, G, IT, UK)
C812	1-126-258-11	ELECT	4700uF	20%	56V	(E, EA)
C813	1-124-887-00	ELECT	3300uF	20%	16V	
C814	1-124-887-00	ELECT	3300uF	20%	16V	
C815	1-124-910-11	ELECT	47uF	20%	50V	
C818	1-161-021-11	CERAMIC	0.047uF	10%	25V	
C819	1-161-021-11	CERAMIC	0.047uF	10%	25V	
C821	1-102-394-11	CERAMIC	0.01uF		250V	
C822	1-124-910-11	ELECT	47uF	20%	50V	(AEP, G, IT, UK)
C822	1-126-867-11	ELECT	33uF	20%	50V	(E, EA)

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Ref. No.	Part No.	Description	Remark
C823	1-161-021-11	CERAMIC 0.047uF 10% 25V	(AEP, E, EA, UK)
C824	1-106-359-00	MYLAR 0.0047uF 5% 50V	(G, IT)
C825	1-106-359-00	MYLAR 0.0047uF 5% 50V	(G, IT)
C826	1-161-494-00	CERAMIC 0.022uF 30% 25V	(G, IT)
C922	1-161-021-11	CERAMIC 0.047uF 10% 25V	(UK)
C923	1-161-021-11	CERAMIC 0.047uF 10% 25V	(UK)
C924	1-126-022-11	ELECT 47uF 20% 16V	(UK)
		< CONNECTOR >	
CN1	* 1-564-321-00	PIN, CONNECTOR 2P	
CN2	* 1-535-141-00	BASE POST 22MM (10MM PITCH) 4P	
CN101	* 1-566-858-41	SOCKET, CONNECTOR 11P	
CN401	1-568-321-11	SOCKET, CONNECTOR 10P	
CN402	1-568-321-11	SOCKET, CONNECTOR 10P	
CN403	* 1-565-344-11	PIN, CONNECTOR (PC BOARD) 8P	
CN501	1-568-838-11	SOCKET, CONNECTOR 21P	
CN605	* 1-564-520-11	PLUG, CONNECTOR 5P	
CN606	* 1-564-519-11	PLUG, CONNECTOR 4P	
CN607	* 1-564-506-11	PLUG, CONNECTOR 3P	
CN801	* 1-566-859-11	SOCKET, CONNECTOR 15P	
CN802	* 1-564-358-00	PIN, CONNECTOR 3P	
		< DIODE >	
D101	8-719-200-82	DIODE 11ES2	
D102	8-719-200-82	DIODE 11ES2	
D302	8-719-912-20	DIODE 1SS120	
D303	8-719-912-20	DIODE 1SS120	
D304	8-719-912-20	DIODE 1SS120	
D305	8-719-912-20	DIODE 1SS120	
D351	8-719-912-20	DIODE 1SS120	
D352	8-719-912-20	DIODE 1SS120	
D402	8-719-000-54	DIODE UZL-6L3	
D501	8-719-001-88	DIODE UZL-15L	
D502	8-719-912-20	DIODE 1SS120	
D503	8-719-912-20	DIODE 1SS120	
D504	8-719-912-20	DIODE 1SS120	
D505	8-719-912-20	DIODE 1SS120	
D506	8-719-912-20	DIODE 1SS120	
D507	8-719-912-20	DIODE 1SS120	
D551	8-719-001-88	DIODE UZL-15L	
D601	8-719-815-85	DIODE 1S1585	
D602	8-719-912-20	DIODE 1SS120	
D604	8-719-815-85	DIODE 1S1585	
D605	8-719-815-85	DIODE 1S1585	
D651	8-719-815-85	DIODE 1S1585	
D801	8-719-912-20	DIODE 1SS120	
D802	8-719-200-77	DIODE 10E2N	
D803	8-719-200-77	DIODE 10E2N	
D804	8-719-912-20	DIODE 1SS120	
D805	8-719-302-38	DIODE RBV-602-01	
D806	8-719-200-77	DIODE 10E2N	
D807	8-719-200-77	DIODE 10E2N	
D808	8-719-014-90	DIODE UZP-7.5B	
D809	8-719-002-70	DIODE UZL-36L	
D810	8-719-200-77	DIODE 10E2N	
D811	8-719-200-77	DIODE 10E2N	
D812	8-719-912-20	DIODE 1SS120	
D813	8-719-912-20	DIODE 1SS120	
D815	8-719-200-82	DIODE 11ES2	
D818	8-719-200-82	DIODE 11ES2	(UK)
D819	8-719-000-81	DIODE UZL-7L3	
		< IC >	
IC121	8-759-000-48	IC MC14052BCP	
IC301	8-759-000-49	IC MC14066BCP	
IC302	8-759-634-50	IC M5218AL	
IC351	8-759-921-22	IC SN74HC164N	
IC401	8-759-822-26	IC LC7522K	
IC402	8-759-633-78	IC M5289P	
IC452	8-759-633-78	IC M5289P	
IC501	8-759-634-50	IC M5218AL	
IC601	8-749-900-78	IC STK4192MK2	(E, EA)
IC601	8-749-920-09	IC STK4152MK2K	(AEP, G, IT, UK)
IC602	8-759-111-68	IC uPC1237HA	
IC801	8-759-604-86	IC M5F7807L	
IC802	8-759-604-90	IC M5F7907L	
ICP803	1-532-845-21	LINK, IC	
ICP804	1-532-845-21	LINK, IC	
		< JACK >	
J601	1-565-352-21	JACK, PIN 2P	(SURROUND SPEAKER)
		< COIL >	
L601	* 1-420-872-00	COIL, AIR CORE	
L651	* 1-420-872-00	COIL, AIR CORE	
		< TRANSISTOR >	
Q301	8-729-900-63	TRANSISTOR DTA124ES	
Q303	8-729-900-80	TRANSISTOR DTC114ES	
Q304	8-729-900-63	TRANSISTOR DTA124ES	
Q305	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q306	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q307	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q308	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q309	8-729-900-63	TRANSISTOR DTA124ES	

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Ref. No.	Part No.	Description	Remark
Q310	8-729-900-63	TRANSISTOR DTA124ES	
Q502	8-729-119-79	TRANSISTOR 2SC2785-FEK	
Q503	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q505	8-729-900-63	TRANSISTOR DTA124ES	
Q506	8-729-900-63	TRANSISTOR DTA124ES	
Q508	8-729-201-56	TRANSISTOR 2SK246-GR2	
Q509	8-729-201-56	TRANSISTOR 2SK246-GR2	
Q552	8-729-119-79	TRANSISTOR 2SC2785-FEK	
Q553	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q558	8-729-201-56	TRANSISTOR 2SK246-GR2	
Q559	8-729-201-56	TRANSISTOR 2SK246-GR2	
Q601	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q602	8-729-900-63	TRANSISTOR DTA124ES	
Q651	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q704	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q801	8-729-111-67	TRANSISTOR 2SB1094-L	
		< RESISTOR >	
R117	1-249-405-11	CARBON 100 5% 1/4W	
R118	1-249-405-11	CARBON 100 5% 1/4W	
R122	1-249-409-11	CARBON 220 5% 1/4W	
R123	1-249-405-11	CARBON 100 5% 1/4W	
R124	1-249-409-11	CARBON 220 5% 1/4W	
R136	1-249-413-11	CARBON 470 5% 1/4W	
R137	1-249-405-11	CARBON 100 5% 1/4W	
R167	1-249-405-11	CARBON 100 5% 1/4W	
R168	1-249-405-11	CARBON 100 5% 1/4W	
R172	1-249-409-11	CARBON 220 5% 1/4W	
R173	1-249-405-11	CARBON 100 5% 1/4W	
R174	1-249-409-11	CARBON 220 5% 1/4W	
R186	1-249-413-11	CARBON 470 5% 1/4W	
R187	1-249-405-11	CARBON 100 5% 1/4W	
R301	1-249-429-11	CARBON 10K 5% 1/4W	
R302	1-249-419-11	CARBON 1.5K 5% 1/4W	
R303	1-249-417-11	CARBON 1K 5% 1/4W	
R304	1-249-412-11	CARBON 390 5% 1/4W	
R305	1-249-429-11	CARBON 10K 5% 1/4W	
R306	1-249-433-11	CARBON 22K 5% 1/4W	
R307	1-249-433-11	CARBON 22K 5% 1/4W	
R308	1-249-433-11	CARBON 22K 5% 1/4W	
R309	1-249-421-11	CARBON 2.2K 5% 1/4W	
R310	1-249-421-11	CARBON 2.2K 5% 1/4W	
R311	1-249-430-11	CARBON 12K 5% 1/4W	
R312	1-249-430-11	CARBON 12K 5% 1/4W	
R313	1-249-421-11	CARBON 2.2K 5% 1/4W	
R314	1-249-421-11	CARBON 2.2K 5% 1/4W	
R315	1-249-435-11	CARBON 33K 5% 1/4W	
R316	1-249-421-11	CARBON 2.2K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R318	1-249-433-11	CARBON 22K 5% 1/4W	
R319	1-249-429-11	CARBON 10K 5% 1/4W	
R320	1-249-419-11	CARBON 1.5K 5% 1/4W	
R321	1-249-417-11	CARBON 1K 5% 1/4W	
R322	1-249-412-11	CARBON 390 5% 1/4W	
R323	1-249-435-11	CARBON 33K 5% 1/4W	
R324	1-249-433-11	CARBON 22K 5% 1/4W	
R325	1-249-433-11	CARBON 22K 5% 1/4W	
R326	1-249-425-11	CARBON 4.7K 5% 1/4W	
R327	1-249-425-11	CARBON 4.7K 5% 1/4W	
R351	1-249-417-11	CARBON 1K 5% 1/4W	
R352	1-249-405-11	CARBON 100 5% 1/4W	
R353	1-249-417-11	CARBON 1K 5% 1/4W	
R354	1-249-417-11	CARBON 1K 5% 1/4W	
R401	1-247-887-00	CARBON 220K 5% 1/4W	
R402	1-249-427-11	CARBON 6.8K 5% 1/4W	
R404	1-249-408-11	CARBON 180 5% 1/4W	
R407	1-249-427-11	CARBON 6.8K 5% 1/4W	
R413	1-247-903-00	CARBON 1M 5% 1/4W	
R414	1-247-903-00	CARBON 1M 5% 1/4W	
R415	1-247-903-00	CARBON 1M 5% 1/4W	
R416	1-247-903-00	CARBON 1M 5% 1/4W	
R417	1-247-903-00	CARBON 1M 5% 1/4W	
R418	1-247-903-00	CARBON 1M 5% 1/4W	
R419	1-247-903-00	CARBON 1M 5% 1/4W	
R420	1-249-417-11	CARBON 1K 5% 1/4W	
R421	1-249-417-11	CARBON 1K 5% 1/4W	
R423	1-249-435-11	CARBON 33K 5% 1/4W	
R424	1-249-426-11	CARBON 5.6K 5% 1/4W	
R451	1-247-887-00	CARBON 220K 5% 1/4W	
R452	1-249-427-11	CARBON 6.8K 5% 1/4W	
R457	1-249-427-11	CARBON 6.8K 5% 1/4W	
R463	1-247-903-00	CARBON 1M 5% 1/4W	
R464	1-247-903-00	CARBON 1M 5% 1/4W	
R465	1-247-903-00	CARBON 1M 5% 1/4W	
R466	1-247-903-00	CARBON 1M 5% 1/4W	
R467	1-247-903-00	CARBON 1M 5% 1/4W	
R468	1-247-903-00	CARBON 1M 5% 1/4W	
R469	1-247-903-00	CARBON 1M 5% 1/4W	
R473	1-249-435-11	CARBON 33K 5% 1/4W	
R474	1-249-426-11	CARBON 5.6K 5% 1/4W	
R501	1-249-421-11	CARBON 2.2K 5% 1/4W	
R502	1-249-429-11	CARBON 10K 5% 1/4W	
R503	1-249-431-11	CARBON 15K 5% 1/4W	
R505	1-249-417-11	CARBON 1K 5% 1/4W	
R506	1-247-891-00	CARBON 330K 5% 1/4W	
R507	1-249-427-11	CARBON 6.8K 5% 1/4W	
R508	1-249-412-11	CARBON 390 5% 1/4W	
R509	1-249-429-11	CARBON 10K 5% 1/4W	

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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
R510	1-249-425-11	CARBON 4.7K	5%	1/4W	
R511	1-249-421-11	CARBON 2.2K	5%	1/4W	
R512	1-249-420-11	CARBON 1.8K	5%	1/4W	
R515	1-249-409-11	CARBON 220	5%	1/4W	
R516	1-249-433-11	CARBON 22K	5%	1/4W	
R517	1-249-433-11	CARBON 22K	5%	1/4W	
R518	1-249-441-11	CARBON 100K	5%	1/4W	
R519	⚠ 1-215-917-11	METAL OXIDE 1K	5%	3W F	
R521	1-247-895-00	CARBON 470K	5%	1/4W	
R522	1-247-895-00	CARBON 470K	5%	1/4W	
R527	1-249-429-11	CARBON 10K	5%	1/4W	
R531	1-249-425-11	CARBON 4.7K	5%	1/4W	
R532	1-249-441-11	CARBON 100K	5%	1/4W	
R533	1-249-441-11	CARBON 100K	5%	1/4W	
R535	1-249-409-11	CARBON 220	5%	1/4W	
R551	1-249-421-11	CARBON 2.2K	5%	1/4W	
R552	1-249-429-11	CARBON 10K	5%	1/4W	
R553	1-249-431-11	CARBON 15K	5%	1/4W	
R555	1-249-417-11	CARBON 1K	5%	1/4W	
R556	1-247-891-00	CARBON 330K	5%	1/4W	
R557	1-249-427-11	CARBON 6.8K	5%	1/4W	
R558	1-249-412-11	CARBON 390	5%	1/4W	
R559	1-249-429-11	CARBON 10K	5%	1/4W	
R560	1-249-425-11	CARBON 4.7K	5%	1/4W	
R561	1-249-421-11	CARBON 2.2K	5%	1/4W	
R562	1-249-441-11	CARBON 100K	5%	1/4W	
R563	1-249-405-11	CARBON 100	5%	1/4W	
R568	1-249-441-11	CARBON 100K	5%	1/4W	
R569	⚠ 1-215-917-11	METAL OXIDE 1K	5%	3W F	
R571	1-247-895-00	CARBON 470K	5%	1/4W	
R572	1-247-895-00	CARBON 470K	5%	1/4W	
R577	1-249-429-11	CARBON 10K	5%	1/4W	
R581	1-249-425-11	CARBON 4.7K	5%	1/4W	
R601	1-249-417-11	CARBON 1K	5%	1/4W	
R602	1-249-438-11	CARBON 56K	5%	1/4W	
R603	1-249-414-11	CARBON 560	5%	1/4W	
R604	1-249-438-11	CARBON 56K	5%	1/4W	
R605	1-249-417-11	CARBON 1K	5%	1/4W	(AEP, G, IT, UK)
R605	1-249-419-11	CARBON 1.5K	5%	1/4W	(E, EA)
R606	1-249-417-11	CARBON 1K	5%	1/4W	(AEP, G, IT, UK)
R606	1-249-419-11	CARBON 1.5K	5%	1/4W	(E, EA)
R607	⚠ 1-212-881-11	FUSIBLE 100	5%	1/4W F	
R608	⚠ 1-212-881-11	FUSIBLE 100	5%	1/4W F	
R609	⚠ 1-217-156-00	RES, METAL PLATE 0.22			
R610	1-249-413-11	CARBON 470	5%	1/4W	
R611	1-249-413-11	CARBON 470	5%	1/4W	

Ref. No.	Part No.	Description			Remark
R612	1-249-389-11	CARBON 4.7	5%	1/4W	
R613	1-249-417-11	CARBON 1K	5%	1/4W	
R614	1-249-431-11	CARBON 15K	5%	1/4W	
R615	1-249-441-11	CARBON 100K	5%	1/4W	
R616	1-249-438-11	CARBON 56K	5%	1/4W	
R617	⚠ 1-215-891-11	METAL OXIDE 680	5%	2W F	(AEP, G, IT, UK)
R617	⚠ 1-215-892-11	METAL OXIDE 1K	5%	2W F	(E, EA)
R619	1-249-437-11	CARBON 47K	5%	1/4W	
R620	1-249-441-11	CARBON 100K	5%	1/4W	
R621	1-249-429-11	CARBON 10K	5%	1/4W	
R622	1-249-396-11	CARBON 18	5%	1/6W	
R623	1-249-396-11	CARBON 18	5%	1/6W	
R625	1-247-727-11	CARBON 10	5%	1/2W	(G, IT)
R632	1-249-389-11	CARBON 4.7	5%	1/4W	
R636	1-249-427-11	CARBON 6.8K	5%	1/4W	
R637	1-249-427-11	CARBON 6.8K	5%	1/4W	
R645	1-249-417-11	CARBON 1K	5%	1/4W	(AEP, G, IT, UK)
R645	1-249-419-11	CARBON 1.5K	5%	1/4W	(E, EA)
R646	1-249-417-11	CARBON 1K	5%	1/4W	(AEP, G, IT, UK)
R646	1-249-419-11	CARBON 1.5K	5%	1/4W	(E, EA)
R651	1-249-417-11	CARBON 1K	5%	1/4W	
R652	1-249-438-11	CARBON 56K	5%	1/4W	
R653	1-249-414-11	CARBON 560	5%	1/4W	
R654	1-249-438-11	CARBON 56K	5%	1/4W	
R655	1-249-417-11	CARBON 1K	5%	1/4W	(AEP, G, IT, UK)
R655	1-249-419-11	CARBON 1.5K	5%	1/4W	(E, EA)
R656	1-249-417-11	CARBON 1K	5%	1/4W	(AEP, G, IT, UK)
R656	1-249-419-11	CARBON 1.5K	5%	1/4W	(E, EA)
R659	⚠ 1-217-156-00	RES, METAL PLATE 0.22			
R660	1-249-413-11	CARBON 470	5%	1/4W	
R661	1-249-413-11	CARBON 470	5%	1/4W	
R662	1-249-389-11	CARBON 4.7	5%	1/4W	
R663	1-249-417-11	CARBON 1K	5%	1/4W	
R664	1-249-431-11	CARBON 15K	5%	1/4W	
R665	1-249-441-11	CARBON 100K	5%	1/4W	
R666	1-249-437-11	CARBON 47K	5%	1/4W	
R672	1-249-396-11	CARBON 18	5%	1/6W	
R673	1-249-396-11	CARBON 18	5%	1/6W	
R675	1-247-727-11	CARBON 10	5%	1/2W	(G, IT)
R682	1-249-389-11	CARBON 4.7	5%	1/4W	
R695	1-249-417-11	CARBON 1K	5%	1/4W	(AEP, G, IT, UK)
R695	1-249-419-11	CARBON 1.5K	5%	1/4W	(E, EA)
R696	1-249-417-11	CARBON 1K	5%	1/4W	(AEP, G, IT, UK)
R696	1-249-419-11	CARBON 1.5K	5%	1/4W	(E, EA)

MAIN | POWER AMP | VOLTAGE SELECTOR

PANEL (DISPLAY/CONTROL) | PIN JACK | VOL

MIC | HP | PGM. F

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
R801	1-247-761-11	CARBON 5.6K 5% 1/2W	
R802	1-249-428-11	CARBON 8.2K 5% 1/4W	
R803	1-249-428-11	CARBON 8.2K 5% 1/4W	
R804	1-249-421-11	CARBON 2.2K 5% 1/4W	
R881	⚠ 1-217-156-00	RES, METAL PLATE 0.22 10% 5W (E, EA)	
R882	⚠ 1-217-156-00	RES, METAL PLATE 0.22 10% 5W (E, EA)	
R883	⚠ 1-217-156-00	RES, METAL PLATE 0.22 10% 5W (E, EA)	
R884	⚠ 1-217-156-00	RES, METAL PLATE 0.22 10% 5W (E, EA)	
		< RELAY >	
RY601	1-515-765-11	RELAY	
		< SWITCH >	
S1	⚠ 1-554-920-51	SWITCH, PUSH (AC POWER) (1 KEY)	
		< TERMINAL BOARD >	
TB601	1-537-240-11	TERMINAL BOARD (CHECKER PIN) (SPEAKER)	
**********			
	* A-4341-692-A	PANEL BOARD, COMPLETE (DISPLAY/CONTROL BOARD)	
	**********		
	* A-4341-693-A	PIN JACK BOARD, COMPLETE (AEP, UK, E, EA)	
	* A-4341-700-A	PIN JACK BOARD, COMPLETE (G, IT)	
	**********		
	* 1-638-648-11	VOL BOARD	
	*********		
	* 1-638-649-11	MIC BAL BOARD	
	**********		
	* 1-638-650-11	HP BOARD	
	********		
	* 1-638-651-11	PGM. F BOARD	
	**********		
	* 3-362-478-01	HOLDER (T), LED	
	* 4-921-941-31	CUSHION (FL)	
	* 4-921-941-61	CUSHION (FL)	
	* 4-942-065-01	HOLDER (EQ), LED	
	* 4-942-065-11	HOLDER (EQ), LED	
	* 4-942-066-01	HOLDER (EQ), FL	
		< CAPACITOR >	
C101	1-126-161-11	ELECT 2.2uF 20% 50V	
C102	1-164-070-11	CERAMIC 100PF 5% 50V	
C103	1-164-066-11	CERAMIC 68PF 5% 50V	
C104	1-126-163-11	ELECT 0.68uF 20% 50V	
C105	1-106-347-00	MYLAR 1500PF 5% 200V	
C106	1-130-480-00	MYLAR 0.0056uF 5% 50V	
C107	1-136-175-00	FILM 0.68uF 5% 50V	
C108	1-124-994-11	ELECT 100uF 20% 10V	

Ref. No.	Part No.	Description	Remark
C111	1-126-163-11	ELECT 0.68uF 20% 50V	
C112	1-126-163-11	ELECT 0.68uF 20% 50V	
C113	1-126-163-11	ELECT 0.68uF 20% 50V	
C141	1-162-286-31	CERAMIC 220PF 10% 50V	(G, IT)
C142	1-162-286-31	CERAMIC 220PF 10% 50V	(G, IT)
C143	1-162-286-31	CERAMIC 220PF 10% 50V	(G, IT)
C144	1-162-286-31	CERAMIC 220PF 10% 50V	(G, IT)
C145	1-162-286-31	CERAMIC 220PF 10% 50V	(G, IT)
C151	1-126-161-11	ELECT 2.2uF 20% 50V	
C152	1-164-070-11	CERAMIC 100PF 5% 50V	
C153	1-164-066-11	CERAMIC 68PF 5% 50V	
C154	1-126-163-11	ELECT 0.68uF 20% 50V	
C155	1-106-347-00	MYLAR 1500PF 5% 200V	
C156	1-130-480-00	MYLAR 0.0056uF 5% 50V	
C157	1-136-175-00	FILM 0.68uF 5% 50V	
C158	1-124-994-11	ELECT 100uF 20% 10V	
C161	1-126-163-11	ELECT 0.68uF 20% 50V	
C162	1-126-163-11	ELECT 0.68uF 20% 50V	
C163	1-126-163-11	ELECT 0.68uF 20% 50V	
C191	1-162-286-31	CERAMIC 220PF 10% 50V	(G, IT)
C192	1-162-286-31	CERAMIC 220PF 10% 50V	(G, IT)
C193	1-162-286-31	CERAMIC 220PF 10% 50V	(G, IT)
C194	1-162-286-31	CERAMIC 220PF 10% 50V	(G, IT)
C195	1-162-286-31	CERAMIC 220PF 10% 50V	(G, IT)
C201	1-126-059-11	ELECT 10uF 20% 50V	
C202	1-126-059-11	ELECT 10uF 20% 50V	
C203	1-124-471-00	ELECT 1000uF 20% 6.3V	
C205	1-124-471-00	ELECT 1000uF 20% 6.3V	
C206	1-124-994-11	ELECT 100uF 20% 10V	
C207	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C208	1-126-161-11	ELECT 2.2uF 20% 50V	
C251	1-136-167-00	FILM 0.15uF 5% 50V	
C252	1-164-073-11	CERAMIC 100PF 10% 50V	
C253	1-164-054-11	CERAMIC 22PF 5% 50V	
C254	1-126-163-11	ELECT 0.68uF 20% 50V	
C255	1-126-163-11	ELECT 0.68uF 20% 50V	
C256	1-164-054-11	CERAMIC 22PF 5% 50V	
C257	1-124-589-11	ELECT 47uF 20% 16V	
C258	1-126-163-11	ELECT 0.68uF 20% 50V	
C259	1-124-589-11	ELECT 47uF 20% 16V	
C701	1-124-994-11	ELECT 100uF 20% 10V	
C702	1-124-473-11	ELECT 1000uF 20% 10V	
C703	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C705	1-164-159-11	CERAMIC 0.1uF 50V	
C706	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C707	1-124-994-11	ELECT 100uF 20% 10V	
C708	1-164-159-11	CERAMIC 0.1uF 50V	
C709	1-161-374-11	CERAMIC 0.0015uF 20% 50V	
C711	1-126-059-11	ELECT 10uF 20% 50V	

PANEL (DISPLAY/CONTROL) | PIN JACK | VOL | MIC | HP

PGM. F

Ref. No.	Part No.	Description			Remark
C712	1-125-486-11	DUBLE LAYERS	0.22F		5.5V
C713	1-124-994-11	ELECT	100uF	20%	10V
C714	1-161-379-00	CERAMIC	0.01uF	20%	25V
C715	1-126-059-11	ELECT	10uF	20%	50V
C717	1-136-165-00	FILM	0.1uF	5%	50V
C718	1-136-159-00	FILM	0.033uF	5%	50V
C719	1-136-165-00	FILM	0.1uF	5%	50V
C721	1-136-165-00	FILM	0.1uF	5%	50V
C726	1-162-282-31	CERAMIC	100PF	10%	50V
C727	1-161-379-00	CERAMIC	0.01uF	20%	25V
C728	1-161-379-00	CERAMIC	0.01uF	20%	25V
C729	1-164-159-11	CERAMIC	0.1uF		50V
C730	1-161-379-00	CERAMIC	0.01uF	20%	25V
C731	1-161-379-00	CERAMIC	0.01uF	20%	25V
C732	1-162-290-31	CERAMIC	470PF	10%	50V
C733	1-162-290-31	CERAMIC	470PF	10%	50V
C734	1-162-290-31	CERAMIC	470PF	10%	50V
C735	1-162-290-31	CERAMIC	470PF	10%	50V
C736	1-162-290-31	CERAMIC	470PF	10%	50V
C737	1-162-290-31	CERAMIC	470PF	10%	50V
C738	1-162-290-31	CERAMIC	470PF	10%	50V
C739	1-162-290-31	CERAMIC	470PF	10%	50V
C740	1-136-165-00	FILM	0.1uF	5%	50V
C741	1-124-997-11	ELECT	470uF	20%	10V
C742	1-124-997-11	ELECT	470uF	20%	10V
C743	1-124-994-11	ELECT	100uF	20%	10V
C744	1-161-494-00	CERAMIC	0.022uF		25V

< CONNECTOR >

CN103	* 1-568-322-21	PLUG, CONNECTOR 10P	
CN104	* 1-568-322-21	PLUG, CONNECTOR 10P	
CN201	* 1-565-347-11	SOCKET, CONNECTOR (PC BOARD)	8P
CN602	* 1-564-508-11	PLUG, CONNECTOR 5P	
CN701	1-568-838-11	SOCKET, CONNECTOR 21P	
CN705	* 1-564-338-00	PIN, CONNECTOR 4P	
CN706	* 1-564-506-11	PLUG, CONNECTOR 3P	

< COMPOSITION CIRCUIT BLOCK >

CP701	1-232-882-11	COMPOSITION CIRCUIT BLOCK	
CP702	1-232-882-11	COMPOSITION CIRCUIT BLOCK	
CP703	1-232-882-11	COMPOSITION CIRCUIT BLOCK	
CP704	1-232-882-11	COMPOSITION CIRCUIT BLOCK	

< DIODE >

D201	8-719-912-20	DIODE 1SS120	
D202	8-719-912-20	DIODE 1SS120	
D701	8-719-200-82	DIODE 11ES2	
D702	8-719-200-82	DIODE 11ES2	
D703	8-719-000-60	DIODE UZL-6M2	
D704	8-719-912-20	DIODE 1SS120	
D705	8-719-912-20	DIODE 1SS120	
D706	8-719-912-20	DIODE 1SS120	
D707	8-719-912-20	DIODE 1SS120	
D708	8-719-912-20	DIODE 1SS120	
D709	8-719-301-38	DIODE SEL2210S-C	
D710	8-719-912-20	DIODE 1SS120	
D711	8-719-912-20	DIODE 1SS120	
D713	8-719-301-38	DIODE SEL2210S-C	
D714	8-719-301-38	DIODE SEL2210S-C	
D715	8-719-301-38	DIODE SEL2210S-C	
D716	8-719-010-26	DIODE UZ-3.9BSB	
D717	8-719-301-38	DIODE SEL2210S-C	
D718	8-719-301-38	DIODE SEL2210S-C	
D719	8-719-912-20	DIODE 1SS120	
D720	8-719-912-20	DIODE 1SS120	
D721	8-719-912-20	DIODE 1SS120	
D722	8-719-912-20	DIODE 1SS120	
D723	8-719-912-20	DIODE 1SS120	
D724	8-719-912-20	DIODE 1SS120	
D725	8-719-912-20	DIODE 1SS120	
D726	8-719-912-20	DIODE 1SS120	
D727	8-719-912-20	DIODE 1SS120	
D728	8-719-912-20	DIODE 1SS120	
D729	8-719-912-20	DIODE 1SS120	
D730	8-719-912-20	DIODE 1SS120	
D731	8-719-912-20	DIODE 1SS120	
D732	8-719-912-20	DIODE 1SS120	
D733	8-719-301-38	DIODE SEL2210S-C	
D734	8-719-301-38	DIODE SEL2210S-C	
D735	8-719-301-38	DIODE SEL2210S-C	
D736	8-719-301-38	DIODE SEL2210S-C	
D737	8-719-301-38	DIODE SEL2210S-C	
D738	8-719-301-38	DIODE SEL2210S-C	
D739	8-719-301-38	DIODE SEL2210S-C	
D740	8-719-301-38	DIODE SEL2210S-C	
D741	8-719-301-38	DIODE SEL2210S-C	
D743	8-719-912-20	DIODE 1SS120	
D744	8-719-200-82	DIODE 11ES2	
D745	8-719-200-82	DIODE 11ES2	
D746	8-719-912-20	DIODE 1SS120	
D747	8-719-912-20	DIODE 1SS120	
D748	8-719-912-20	DIODE 1SS120	
D749	8-719-912-20	DIODE 1SS120	
D750	8-719-912-20	DIODE 1SS120	
D751	8-719-912-20	DIODE 1SS120	
D752	8-719-010-32	DIODE UZ-4.7BSA	
D753	8-719-912-20	DIODE 1SS120	

PANEL (DISPLAY/CONTROL) | PIN JACK | VOL | MIC | HP

PGM. F

Ref. No.	Part No.	Description	Remark
D754	8-719-912-20	DIODE 1SS120	
D757	8-719-912-20	DIODE 1SS120	
		< FILTER >	
FL701	1-519-666-11	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC101	8-759-634-51	IC M5218AP	
IC122	8-759-000-49	IC MC14066BCP	
IC123	8-759-000-49	IC MC14066BCP	
IC201	8-759-514-76	IC MM1031XS	
IC251	8-759-634-51	IC M5218AP	
IC701	8-759-822-27	IC LC7565K	
IC702	8-759-991-11	IC XR1091DCP	
IC704	8-759-820-62	IC LB1639	
IC706	8-759-987-16	IC LM393P	
IC708	8-759-154-26	IC uPD75212ACW-281	
IC710	8-759-635-63	IC M51943BSL	
		< JACK >	
J101	1-565-303-11	JACK, PIN 6P	
J102	1-565-304-11	JACK, PIN 4P	
J201	1-565-934-11	JACK, PIN 2P	
J202	1-565-934-11	JACK, PIN 2P	
J251	1-507-854-00	JACK, PHONE (MIC)	
J701	1-507-854-00	JACK, PHONE (HEADPHONES)	
		< COIL >	
L201	1-408-080-00	INDUCTOR 100uH	
L701	1-408-121-00	INDUCTOR 22uH	
L702	1-408-121-00	INDUCTOR 22uH	
		< TRANSISTOR >	
Q121	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q123	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q124	8-729-900-80	TRANSISTOR DTC114ES	
Q201	8-729-119-77	TRANSISTOR 2SA1175-FEK	
Q202	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q203	8-729-119-77	TRANSISTOR 2SA1175-FEK	
Q204	8-729-900-63	TRANSISTOR DTA124ES	
Q205	8-729-900-80	TRANSISTOR DTC114ES	
Q206	8-729-900-80	TRANSISTOR DTC114ES	
Q207	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q701	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q702	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q703	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q705	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q706	8-729-900-80	TRANSISTOR DTC114ES	
Q707	8-729-900-80	TRANSISTOR DTC114ES	
Q708	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q709	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q710	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q711	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q712	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q713	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q714	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q715	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q716	8-729-620-05	TRANSISTOR 2SC2603-EF	
		< RESISTOR >	
R101	1-249-417-11	CARBON 1K 5% 1/4W	
R102	1-249-437-11	CARBON 47K 5% 1/4W	
R103	1-247-897-11	CARBON 560K 5% 1/4W	
R104	1-249-415-11	CARBON 680 5% 1/4W	
R105	1-249-437-11	CARBON 47K 5% 1/4W	
R106	1-247-897-11	CARBON 560K 5% 1/4W	
R107	1-249-429-11	CARBON 10K 5% 1/4W	
R108	1-249-405-11	CARBON 100 5% 1/4W	
R109	1-249-405-11	CARBON 100 5% 1/4W	
R110	1-249-413-11	CARBON 470 5% 1/4W	
R111	1-249-405-11	CARBON 100 5% 1/4W	
R112	1-249-405-11	CARBON 100 5% 1/4W	
R113	1-249-433-11	CARBON 22K 5% 1/4W	
R114	1-249-433-11	CARBON 22K 5% 1/4W	
R115	1-249-433-11	CARBON 22K 5% 1/4W	
R116	1-249-433-11	CARBON 22K 5% 1/4W	
R121	1-249-417-11	CARBON 1K 5% 1/4W	
R125	1-247-887-00	CARBON 220K 5% 1/4W	
R126	1-247-887-00	CARBON 220K 5% 1/4W	
R127	1-249-417-11	CARBON 1K 5% 1/4W	
R128	1-249-417-11	CARBON 1K 5% 1/4W	
R129	1-247-887-00	CARBON 220K 5% 1/4W	
R132	1-249-433-11	CARBON 22K 5% 1/4W	
R133	1-249-433-11	CARBON 22K 5% 1/4W	
R140	1-249-413-11	CARBON 470 5% 1/4W	
R142	1-249-417-11	CARBON 1K 5% 1/4W	(G, IT)
R143	1-247-887-00	CARBON 220K 5% 1/4W	
R151	1-249-417-11	CARBON 1K 5% 1/4W	
R152	1-249-437-11	CARBON 47K 5% 1/4W	
R153	1-247-897-11	CARBON 560K 5% 1/4W	
R154	1-249-415-11	CARBON 680 5% 1/4W	
R155	1-249-437-11	CARBON 47K 5% 1/4W	
R156	1-247-897-11	CARBON 560K 5% 1/4W	
R157	1-249-429-11	CARBON 10K 5% 1/4W	
R158	1-249-405-11	CARBON 100 5% 1/4W	

PANEL (DISPLAY/CONTROL) PIN JACK VOL MIC HP

PGM. F

Ref. No.	Part No.	Description				Remark
R159	1-249-405-11	CARBON	100	5%	1/4W	
R160	1-249-413-11	CARBON	470	5%	1/4W	
R161	1-249-405-11	CARBON	100	5%	1/4W	
R162	1-249-405-11	CARBON	100	5%	1/4W	
R171	1-249-417-11	CARBON	1K	5%	1/4W	
R175	1-247-887-00	CARBON	220K	5%	1/4W	
R176	1-247-887-00	CARBON	220K	5%	1/4W	
R177	1-249-417-11	CARBON	1K	5%	1/4W	
R178	1-249-417-11	CARBON	1K	5%	1/4W	
R179	1-247-887-00	CARBON	220K	5%	1/4W	
R190	1-249-413-11	CARBON	470	5%	1/4W	
R192	1-249-417-11	CARBON	1K	5%	1/4W	(G, IT)
R193	1-247-887-00	CARBON	220K	5%	1/4W	
R201	1-247-804-11	CARBON	75	5%	1/4W	
R202	1-247-804-11	CARBON	75	5%	1/4W	
R203	1-249-408-11	CARBON	180	5%	1/4W	
R204	1-249-433-11	CARBON	22K	5%	1/4W	
R205	1-249-408-11	CARBON	180	5%	1/4W	
R206	1-249-408-11	CARBON	180	5%	1/4W	
R207	1-249-417-11	CARBON	1K	5%	1/4W	
R208	1-249-408-11	CARBON	180	5%	1/4W	
R209	1-249-429-11	CARBON	10K	5%	1/4W	
R210	1-249-433-11	CARBON	22K	5%	1/4W	
R211	1-249-429-11	CARBON	10K	5%	1/4W	
R212	1-249-403-11	CARBON	68	5%	1/4W	
R213	1-249-433-11	CARBON	22K	5%	1/4W	
R214	1-249-403-11	CARBON	68	5%	1/4W	
R215	1-249-426-11	CARBON	5.6K	5%	1/4W	
R216	1-249-433-11	CARBON	22K	5%	1/4W	
R217	1-249-433-11	CARBON	22K	5%	1/4W	
R251	1-249-441-11	CARBON	100K	5%	1/4W	
R252	1-249-429-11	CARBON	10K	5%	1/4W	
R253	1-249-429-11	CARBON	10K	5%	1/4W	
R254	1-247-901-11	CARBON	820K	5%	1/4W	
R255	1-249-441-11	CARBON	100K	5%	1/4W	
R256	1-249-441-11	CARBON	100K	5%	1/4W	
R257	1-247-901-11	CARBON	820K	5%	1/4W	
R258	1-249-405-11	CARBON	100	5%	1/4W	
R259	1-249-405-11	CARBON	100	5%	1/4W	
R260	1-249-429-11	CARBON	10K	5%	1/4W	
R261	1-249-409-11	CARBON	220	5%	1/4W	
R262	1-249-405-11	CARBON	100	5%	1/4W	
R263	1-249-405-11	CARBON	100	5%	1/4W	
R264	1-249-417-11	CARBON	1K	5%	1/4W	
R624	1-247-749-11	CARBON	560	5%	1/2W	
R674	1-247-749-11	CARBON	560	5%	1/2W	
R701	1-249-441-11	CARBON	100K	5%	1/4W	
R702	1-249-433-11	CARBON	22K	5%	1/4W	
R703	1-249-409-11	CARBON	220	5%	1/4W	
R704	1-249-433-11	CARBON	22K	5%	1/4W	
R705	1-249-439-11	CARBON	68K	5%	1/4W	
R706	1-249-393-11	CARBON	10	5%	1/4W	
R707	1-249-417-11	CARBON	1K	5%	1/4W	
R708	1-249-433-11	CARBON	22K	5%	1/4W	
R709	1-249-427-11	CARBON	6.8K	5%	1/4W	
R710	1-249-419-11	CARBON	1.5K	5%	1/4W	
R711	1-249-393-11	CARBON	10	5%	1/4W	
R712	1-249-429-11	CARBON	10K	5%	1/4W	
R713	1-249-441-11	CARBON	100K	5%	1/4W	
R714	1-247-891-00	CARBON	330K	5%	1/4W	
R715	1-247-891-00	CARBON	330K	5%	1/4W	
R716	1-249-433-11	CARBON	22K	5%	1/4W	
R717	1-249-417-11	CARBON	1K	5%	1/4W	
R718	1-249-411-11	CARBON	330	5%	1/4W	
R719	1-249-441-11	CARBON	100K	5%	1/4W	
R720	1-249-409-11	CARBON	220	5%	1/4W	
R721	1-249-425-11	CARBON	4.7K	5%	1/4W	
R722	1-249-441-11	CARBON	100K	5%	1/4W	
R723	1-249-425-11	CARBON	4.7K	5%	1/4W	
R725	1-249-425-11	CARBON	4.7K	5%	1/4W	
R726	1-249-432-11	CARBON	18K	5%	1/4W	
R729	1-249-417-11	CARBON	1K	5%	1/4W	
R730	1-249-428-11	CARBON	8.2K	5%	1/4W	
R731	1-249-428-11	CARBON	8.2K	5%	1/4W	
R732	1-249-417-11	CARBON	1K	5%	1/4W	
R733	1-249-417-11	CARBON	1K	5%	1/4W	
R734	1-249-417-11	CARBON	1K	5%	1/4W	
R735	1-249-417-11	CARBON	1K	5%	1/4W	
R736	1-249-411-11	CARBON	330	5%	1/4W	
R737	1-249-429-11	CARBON	10K	5%	1/4W	
R738	1-249-417-11	CARBON	1K	5%	1/4W	
R739	1-249-405-11	CARBON	100	5%	1/4W	
R740	1-249-417-11	CARBON	1K	5%	1/4W	
R741	1-249-417-11	CARBON	1K	5%	1/4W	
R742	1-249-417-11	CARBON	1K	5%	1/4W	
R743	1-249-433-11	CARBON	22K	5%	1/4W	
R744	1-249-417-11	CARBON	1K	5%	1/4W	
R745	1-249-417-11	CARBON	1K	5%	1/4W	
R748	1-249-441-11	CARBON	100K	5%	1/4W	
R749	1-249-441-11	CARBON	100K	5%	1/4W	
R750	1-249-441-11	CARBON	100K	5%	1/4W	
R751	1-249-441-11	CARBON	100K	5%	1/4W	
R752	1-249-433-11	CARBON	22K	5%	1/4W	
R753	1-249-411-11	CARBON	330	5%	1/4W	
R754	1-249-411-11	CARBON	330	5%	1/4W	
R755	1-249-433-11	CARBON	22K	5%	1/4W	
R756	1-249-396-11	CARBON	18	5%	1/6W	
R757	1-249-396-11	CARBON	18	5%	1/6W	

PANEL (DISPLAY/CONTROL) | PIN JACK | VOL | MIC | HP

PGM. F

Ref. No.	Part No.	Description	Remark
R758	1-249-396-11	CARBON 18 5% 1/6W	
R759	1-249-396-11	CARBON 18 5% 1/6W	
R760	1-249-396-11	CARBON 18 5% 1/6W	
R761	1-249-396-11	CARBON 18 5% 1/6W	
R762	1-249-396-11	CARBON 18 5% 1/6W	
R763	1-249-441-11	CARBON 100K 5% 1/4W	
R764	1-249-441-11	CARBON 100K 5% 1/4W	
R765	1-249-441-11	CARBON 100K 5% 1/4W	
R766	1-249-441-11	CARBON 100K 5% 1/4W	
R767	1-249-441-11	CARBON 100K 5% 1/4W	
R768	1-249-441-11	CARBON 100K 5% 1/4W	
R769	1-249-433-11	CARBON 22K 5% 1/4W	
R770	1-249-429-11	CARBON 10K 5% 1/4W	
R771	1-249-429-11	CARBON 10K 5% 1/4W	
R772	1-249-433-11	CARBON 22K 5% 1/4W	
R773	1-249-405-11	CARBON 100 5% 1/4W	
R775	1-249-429-11	CARBON 10K 5% 1/4W	
R776	1-249-405-11	CARBON 100 5% 1/4W	
R779	1-249-429-11	CARBON 10K 5% 1/4W	
R781	1-249-441-11	CARBON 100K 5% 1/4W	
R782	1-249-441-11	CARBON 100K 5% 1/4W	
R783	1-249-441-11	CARBON 100K 5% 1/4W	
R784	1-249-409-11	CARBON 220 5% 1/4W	
		< VARIABLE RESISTOR >	
RV251	1-241-317-11	RES, VAR, CARBON 50K (MIC LEVEL)	
RV601	1-241-318-11	RES, VAR, CARBON 100K (BALANCE)	
RV702	1-238-708-11	RES, VAR, CARBON 10K/100K/100K (VOLUME)	
		< SWITCH >	
S702	1-554-303-21	SWITCH, TACTILE (PHONO)	
S703	1-554-303-21	SWITCH, TACTILE (TUNER)	
S704	1-554-303-21	SWITCH, TACTILE (CD)	
S705	1-554-303-21	SWITCH, TACTILE (TAPE)	
S706	1-554-303-21	SWITCH, TACTILE (VIDEO 1)	
S707	1-554-303-21	SWITCH, TACTILE (VIDEO 2)	
S708	1-554-303-21	SWITCH, TACTILE (EFECT)	
S709	1-554-303-21	SWITCH, TACTILE (SURROUND MODE)	
S711	1-554-303-21	SWITCH, TACTILE (PROGRAM FUNCTION)	
S712	1-554-303-21	SWITCH, TACTILE (DBFB)	
S713	1-554-303-21	SWITCH, TACTILE (FLAT)	
S714	1-554-303-21	SWITCH, TACTILE (REVERSE)	
S715	1-554-303-21	SWITCH, TACTILE (DISPLAY)	
S716	1-554-303-21	SWITCH, TACTILE (SURROUND LEVEL)	
S718	1-554-303-21	SWITCH, TACTILE (JUZZ CLUB/1)	
S719	1-554-303-21	SWITCH, TACTILE (STUDIUM/2)	
S720	1-554-303-21	SWITCH, TACTILE (DISCO/3)	
S721	1-554-303-21	SWITCH, TACTILE (SYMPHONY/4)	
S722	1-554-303-21	SWITCH, TACTILE (MOVIE/5)	
S723	1-554-303-21	SWITCH, TACTILE (POPS)	
S724	1-554-303-21	SWITCH, TACTILE (BGM)	
S725	1-554-303-21	SWITCH, TACTILE (TV-NEWS)	
S726	1-554-303-21	SWITCH, TACTILE (WM)	
S727	1-554-303-21	SWITCH, TACTILE (CAR)	
S728	1-554-303-21	SWITCH, TACTILE (PERSONAL FILE 1-5)	
S729	1-554-303-21	SWITCH, TACTILE (△)	
S730	1-554-303-21	SWITCH, TACTILE (▽)	
S731	1-554-303-21	SWITCH, TACTILE (▷)	
S732	1-554-303-21	SWITCH, TACTILE (◁)	
S733	1-554-303-21	SWITCH, TACTILE (MEMORY)	
		< VIBRATOR >	
X701	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)	

****

MISCELLANEOUS

****

12		1-590-243-11	WIRE, FLAT TYPE (21 CORE)
59	⚠	1-575-654-11	CORD, POWER (AEP, G, IT, UK)
59	⚠	1-575-656-11	CORD, POWER (UK)
59	⚠	1-575-669-21	CORD, POWER (E, AUS)
68	*	1-639-252-11	VOLTAGE SELECTOR BOARD (E, EA, AUS)
CNJ901	⚠	1-526-751-11	OUTLET, AC (UK)
CNJ901	⚠	1-526-794-11	OUTLET, AC (AEP, G, IT, EA, AUS)
CNJ901	⚠	1-526-882-00	OUTLET, AC (E)
F1	⚠	1-532-259-00	FUSE T1.6A
F2	⚠	1-532-259-00	FUSE T1.6A
F3	⚠	1-532-388-51	FUSE T2A
F4	⚠	1-532-388-51	FUSE T2A
J251		1-507-854-00	JACK, LARGE TYPE (MIC)
J701		1-507-854-00	JACK, LARGE TYPE (HEADPHONES)
RV251		1-241-317-11	RES, VAR, CARBON 50K (MIC LEVEL)
RV601		1-241-318-11	RES, VAR, CARBON 100K (BALANCE)
T901	⚠	1-450-422-11	TRANSFOMER, POWER (E, EA, AUS)
T901	⚠	1-450-423-11	TRANSFOMER, POWER (AEP, G, IT, UK)

****

ACCESSORY & PACKING MATERIAL

* 4-934-859-01 CUSHION

****

HARDWARE LIST

# 1	7-621-773-93	SCREW (PANEL 2.6 TP2)
# 2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S
# 3	7-682-549-04	SCREW +BVTT 3X10 (S)
# 4	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
# 5	7-682-560-04	SCREW +BVTT 4X6 (S)
# 6	7-682-548-04	SCREW +BVTT 3X8 (S)
# 7	7-685-534-19	SCREW +PTP 2.6X8 (E, EA, AUS)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Sony Corporation

Audio Group

English
91B1866-1
Printed in Japan
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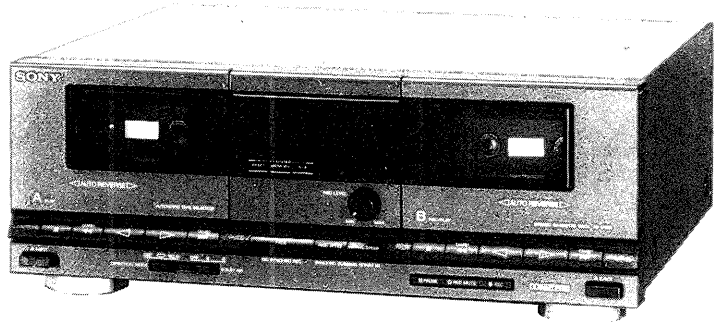
Published by Customer Relations and Service Group.

9-956-205-11

TC-D505

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model



Model Name Using Similar Mechanism		TC-WR520
Tape Transport Mechanism Type	DECK A	TCM-190RA12 or TCM-190RA13
	DECK B	TCM-190RB22

SPECIFICATIONS

Recording system	4-track 2-channel stereo
Frequency response	DOLBY NR OFF With Type IV cassette (Sony METAL-ES) 30 Hz to 15 kHz (±3 dB) With Type II cassette (Sony UX-S) 40 Hz to 14 kHz (±3 dB) With Type I cassette (Sony HF-S) 40 Hz to 14 kHz (±3 dB)
Wow and flutter	±0.2% (DIN)
Weight	Approx. 3.4 kg (7 lbs 8 oz)
Dimensions	Approx. 355 × 132.5 × 310 mm (w/h/d, including projections) (14 × 5 1/4 × 12 1/4 inches)

Design and specifications subject to change without notice.

Note
This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

** Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
"DOLBY" and the double-D symbol ◻◻ are trademarks of Dolby Laboratories Licensing Corporation.

使用時は添付資料も参照のこと
Refer to the additional documents

STEREO CASSETTE DECK

SONY®

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

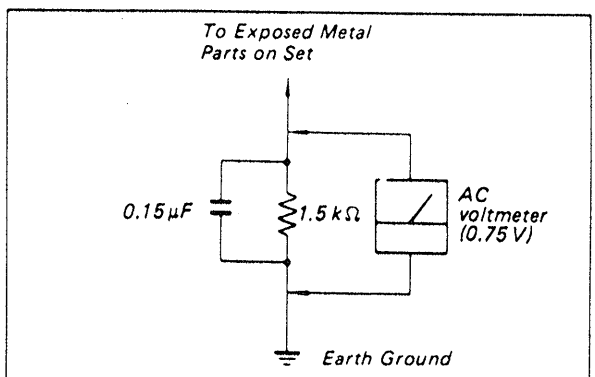


Fig. A. Using an AC voltmeter to check AC leakage.

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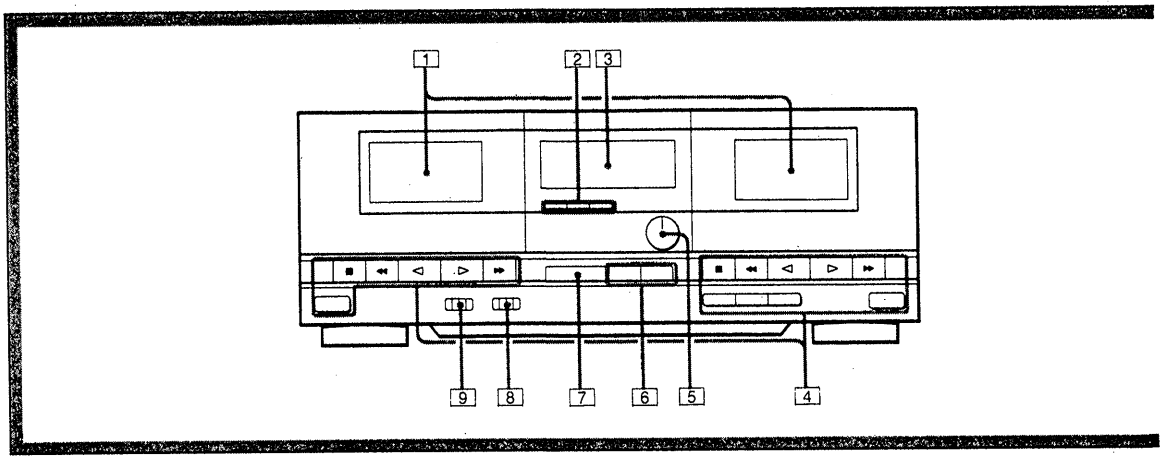
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL



Cassette deck

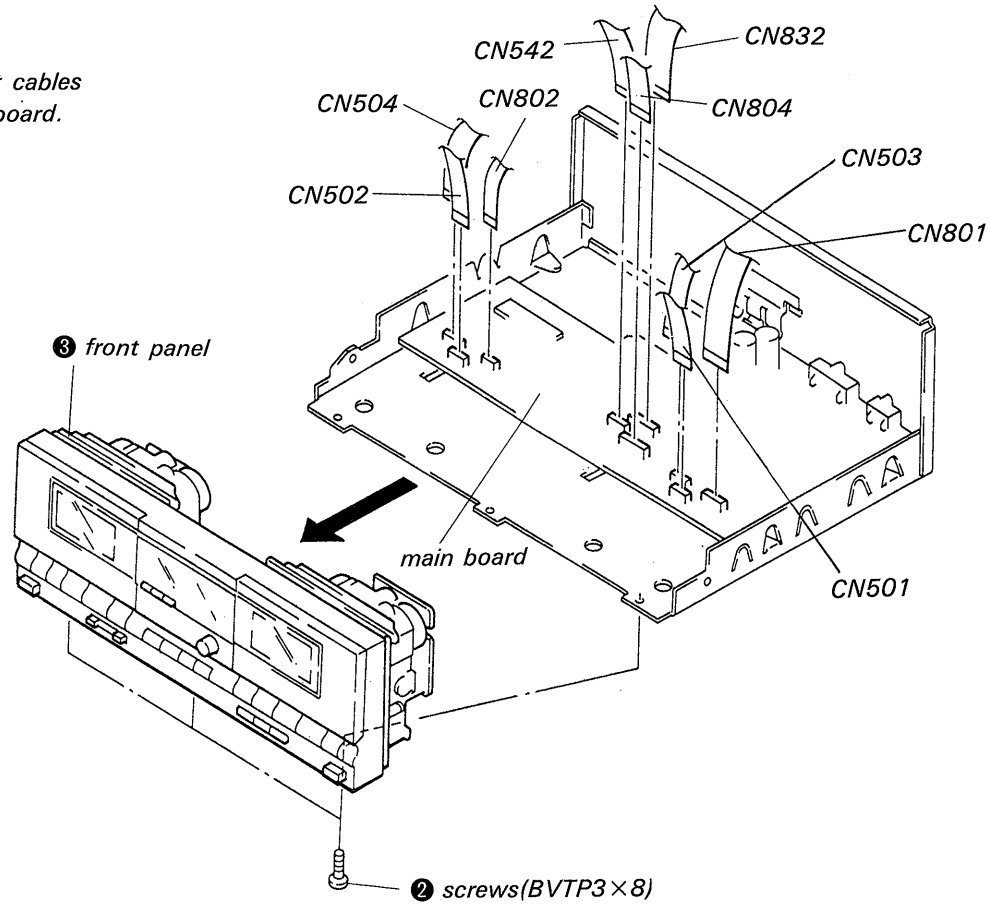
1 Cassette holders
2 Counter setting buttons ㉔
3 Display window
4 Tape operation buttons
◀◀ Leftward or fast reverse winding, ▶▶ Rightward or fast forward winding,
▶ Forward play, ◀ Reverse play, ■ Stop, ⏏ Eject,
❚❚ Pause (deck B only), O Record muting,
● Record (deck B only)
5 REC (recording) LEVEL control ㉖
6 SYNCHRO DUBBING buttons ㉝
7 CD SYNCHRO REC (EDIT) button
(only for the system used with CDP-M42) ㉕
8 DOLBY NR (noise reduction) switch ⑱
9 DIRECTION MODE selector ⑳

SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

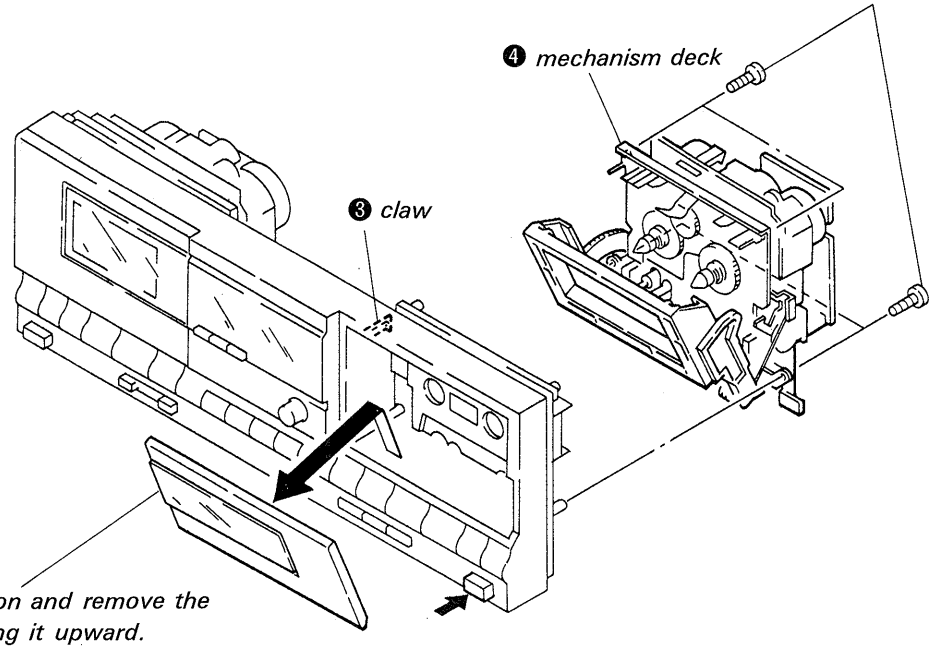
FRONT PANEL

❶ *Remove the flat cables from the main board.*



MECHANISM DECK

❷ *screws(BVTP2.6×6)*



❶ *Press the eject button and remove the cassette lid by sliding it upward.*

SECTION 3
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
   record/playback head　　pinch roller
   erase head　　rubber belts
   capstan　　idler
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed in the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	35 to 60g • cm (0.49 to 0.83 oz • inch)
FWD Back tension	CQ-102C	2 to 6g•cm (0.03 to 0.08 oz•inch)
REV	CQ-102RC	35 to 60g • cm (0.49 to 0.83 oz • inch)
REV Back tension	CQ-102RC	2 to 6g•cm (0.03 to 0.08 oz•inch)
FF, REW	CQ-201B	70 to 110g • cm (0.98 to 1.52 oz • inch)

SECTION 4
ELECTRICAL ADJUSTMENTS

Note: The adjustment should be performed in the order given in the service manual. As a rule, adjustment about playback should be performed before adjustment about recording.
The adjustments should be performed for both L-CH and R-CH.

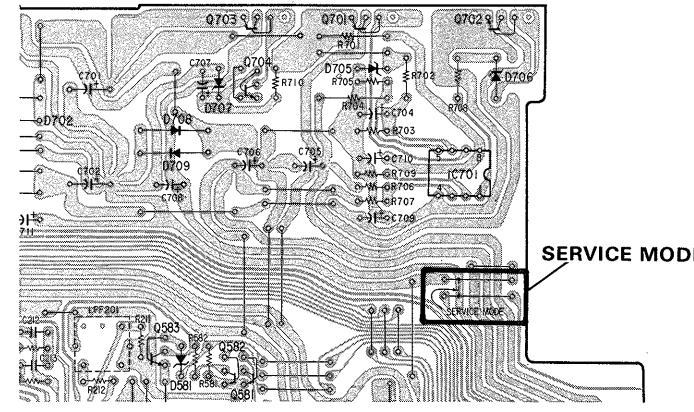
●Test Mode

The Test mode is activated by shorting Test Point Service mode (IC851 34 pin changes over to "L") with the POWER switch in OFF position, then turning on the POWER switch.
In this mode, the following functions operate:

1. Source monitor
   Line mute is cancelled during recording.
2. High speed playback
   High speed playback is executed when the HIGH SPEED (BUBBING) button is pressed during playback. Normal speed playback is restored when the button is pressed again.
3. Record memory
   The tape counter is reset to "0" at the record start point.

After adjustment, open the Service mode to cancel the Test mode.

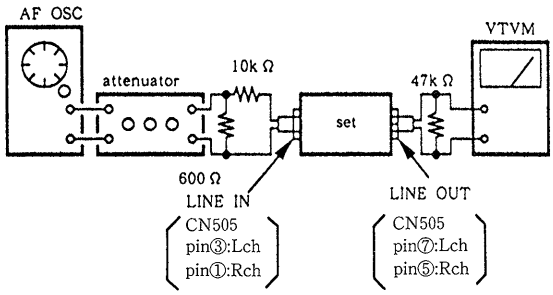
[MAIN BOARD] (CONDUCTOR SIDE)



- Switches and controls should be set as follows unless otherwise specified.
  DD NR switch : OFF
  DIR MODE switch : ⇄

- Standard Record:
  Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

– Record Mode –



Standard Input Level

input terminal	LINE IN
source impedance	10kΩ
input level	0.25V (−10dB)

Standard Output Level

output terminal	LINE OUT
load impedance	47kΩ
output level	0.44V (−5dB)

Test tape

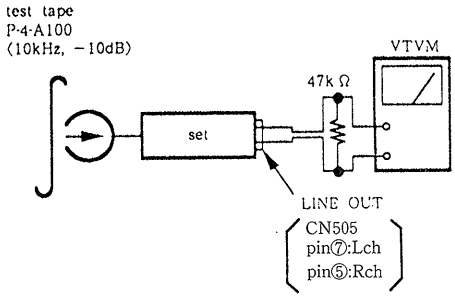
Type	Signal	Used for
P-4-A100	10kHz, −10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	PB Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

Record/Playback Head Azimuth Adjustment

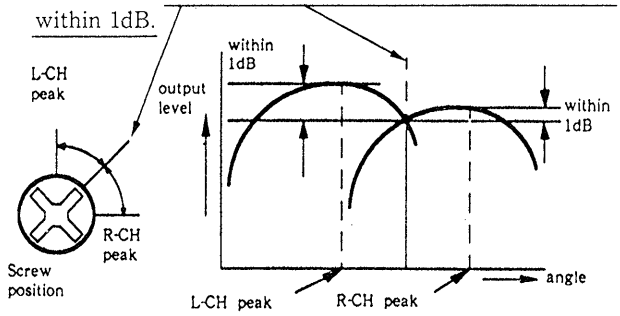
DECK A DECK B

Procedure :

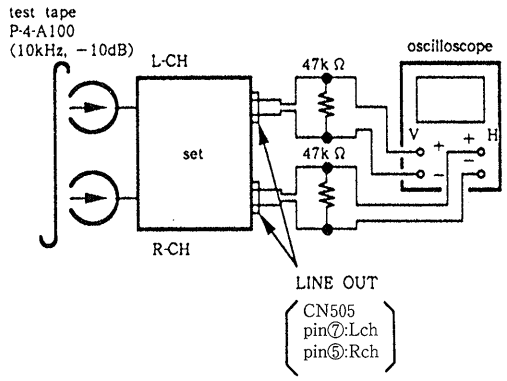
1. Mode: FWD playback

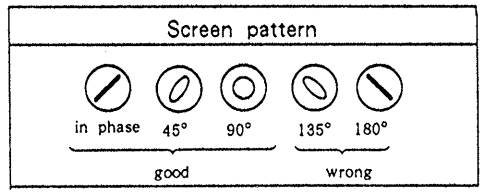


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.



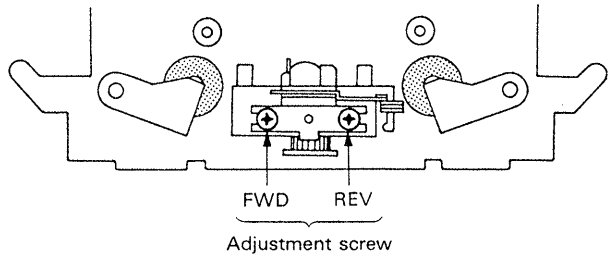
3. Phase Check
   Mode: playback





4. Set in the REV mode and repeat the step 1-3.
5. After the adjustment, lock the screws with locking compound.

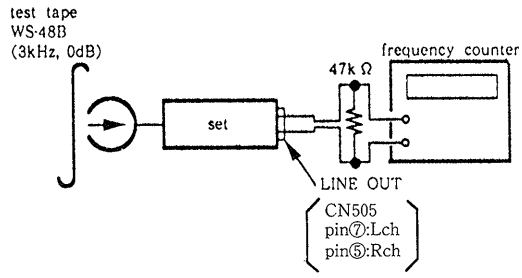
Adjustment Location : Record/playback head



Tape Speed Adjustment DECK A DECK B

Procedure :

Mode: playback



Perform high speed adjustment before normal speed adjustment.

(High speed adjustment)

1. Continue pressing the SYNCHRO BUBBING HIGH SPEED switch.
2. Check that frequency counter reading is within the standard value 6,000±30Hz.
3. If out of the standard, adjust each RV72 so that the frequency counter reading satisfies 6,000±30Hz on both A and B decks.
4. Change over to REV playback status, and repeat the above steps 1 to 3.

(Normal speed adjustment)

1. Continue pressing the SYNCHTO BUBBING NORM SPEED switch.
2. Check that the frequency counter reading is within the standard value 3,000±30Hz.
3. If out of the standard, adjust each RV71 so that the frequency counter reading satisfies 3,000±30Hz on both A and B decks.
4. Change over to REV playback status, and repeat the above steps 1 to 3.

Frequency difference between the beginning and the end of the tape should be within 3%.
Frequency difference between deck A and deck B the beginning of the tape should be within 1.5%.

Adjustment Location :

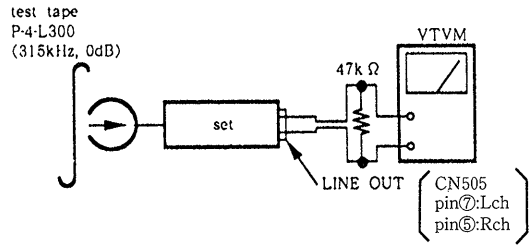
MD(A), MD(B) board

Playback Level Adjustment

DECK A DECK B

Procedure :

Mode: playback



Adjust RV11 (L-CH), RV21 (R-CH) so that the reading on VTVM meets the adjustment limits below.

Adjustment Limits :

LINE OUT level: −5±0.5dB (0.42−0.46V)

Level difference between channels: less than 0.5dB

Check that the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

Adjustment Location : MD(A), MD(B) board

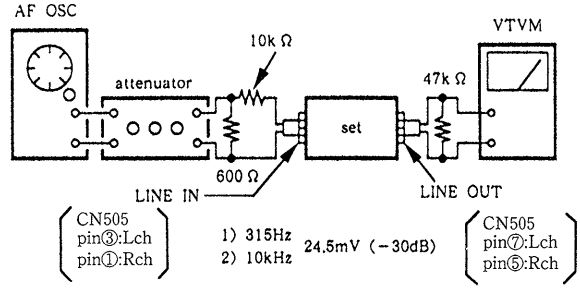
Record Bias Adjustment DECK B

Setting :

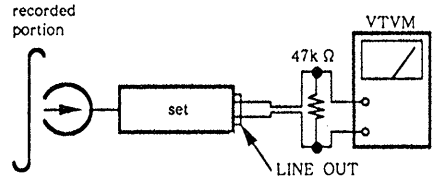
REC LEVEL control: Standard Record (See page 6.)

Procedure :

1. Mode: record



2. Mode: playback



Playback the signal recorded in step 1.
Confirm that the 10kHz playback output is 0±0.5dB relative to the 315Hz output. If necessary, adjust RV12 (L-CH), RV22 (R-CH) and repeat the steps given above.

Adjustment Location : MD(B) board

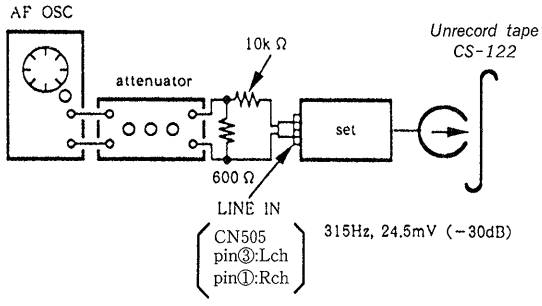
Record Level Adjustment DECK B

Setting :

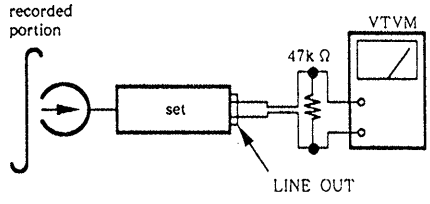
REC LEVEL control: Standard Record (See page 6.)

Procedure :

1. Mode: record



2. Mode: playback

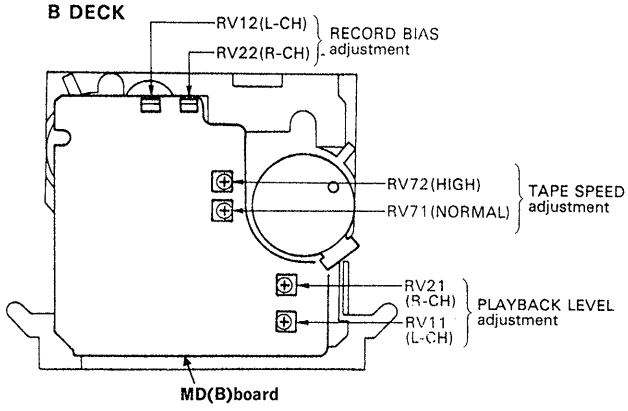


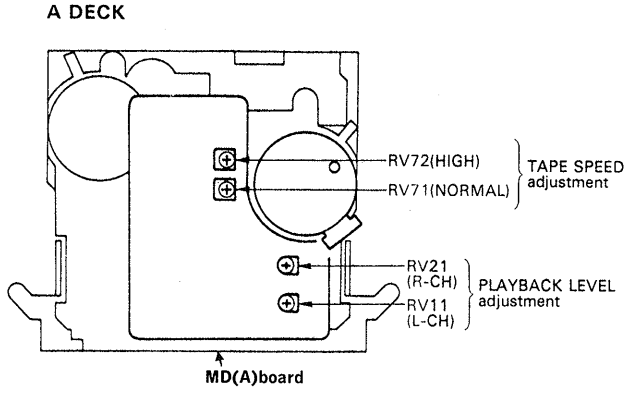
3. Playback the signal recorded in step 1.
   Confirm that the signal level is within the adjustment limits below. If necessary, adjust RV101 (L-CH), RV 201 (R-CH) and repeat the step1-2.

Adjustment Limits : −25dB±0.5dB (42−46mV)

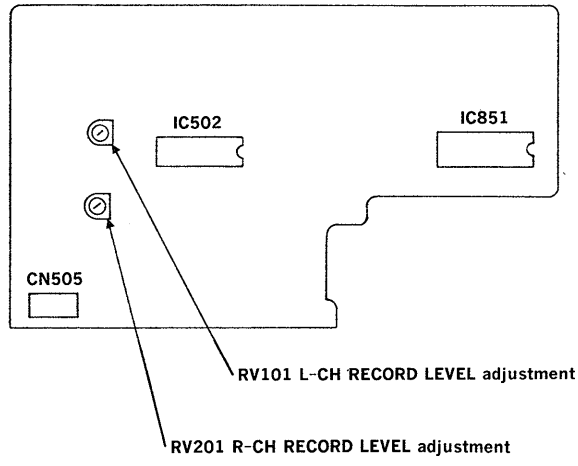
Adjustment Location : AUDIO board (component side)

−Adjustment Parts Location Diagrams−





AUDIO BOARD (COMPONENT SIDE)



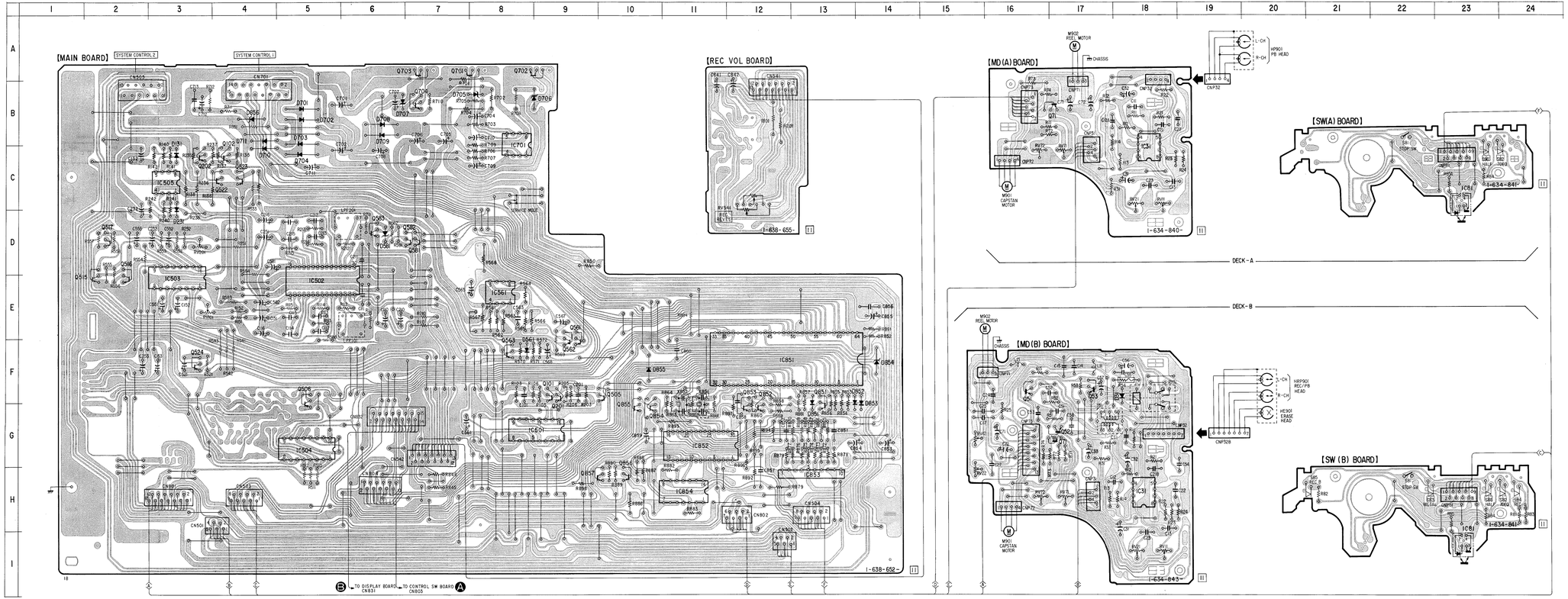
SECTION 5
DIAGRAMS

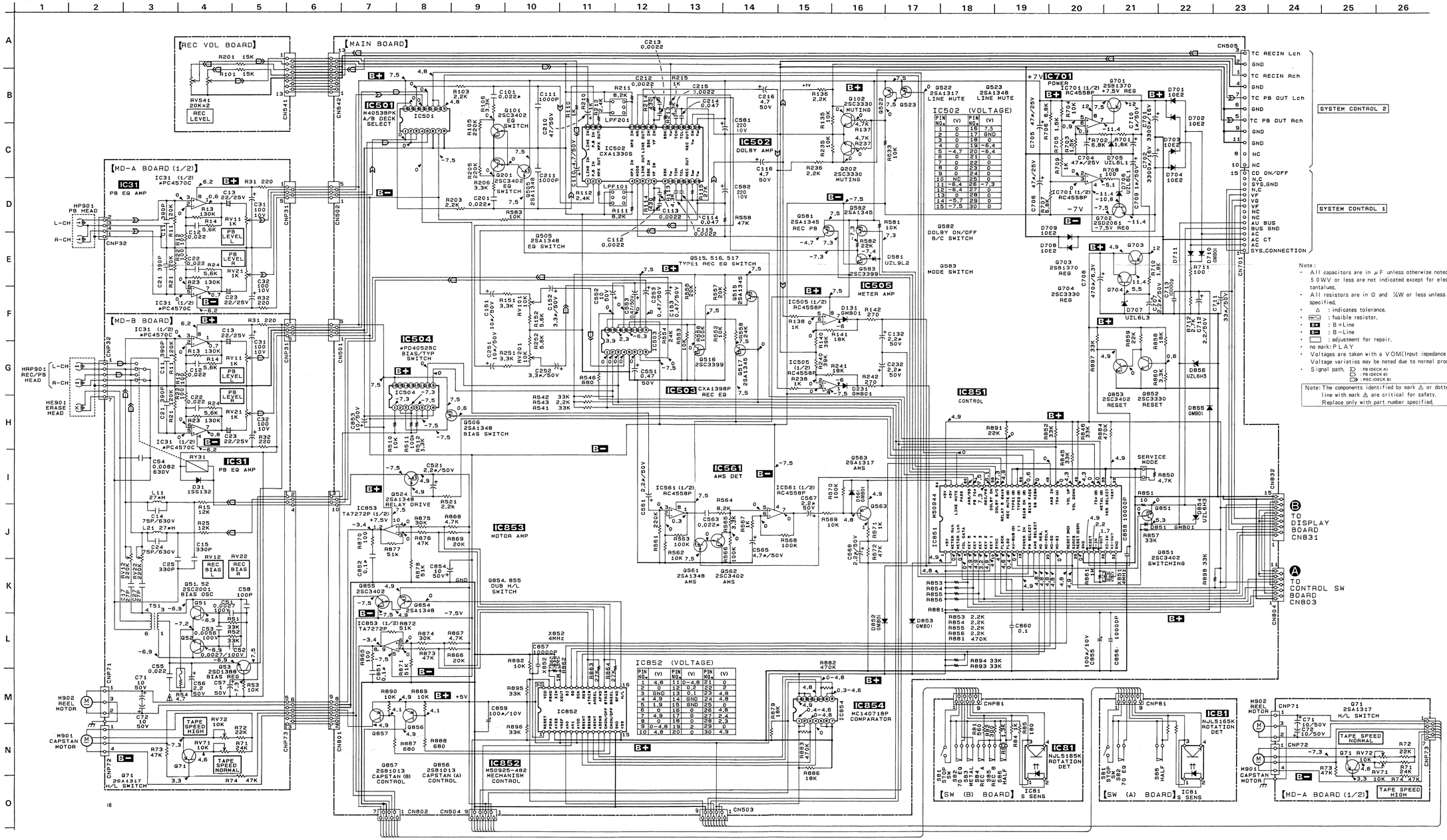
● SEMICONDUCTOR LOCATION

Ref. No.	Location
D 3 1	F-1 8
D 1 3 1	C-3
D 2 3 1	D-3
D 5 6 1	F-8
D 5 8 1	D-6
D 7 0 1	B-5
D 7 0 2	B-5
D 7 0 3	B-5
D 7 0 4	C-5
D 7 0 5	B-8
D 7 0 6	B-9
D 7 0 7	B-6
D 7 0 8	B-6
D 7 0 9	B-6
D 7 1 0	C-4
D 7 1 1	B-4
D 8 5 1	G-1 3
D 8 5 2	F-1 4
D 8 5 3	G-1 4
D 8 5 4	F-1 4
D 8 5 5	F-1 0
D 8 5 6	B-4
I C 3 1 (MD (A))	C-1 8
I C 3 1 (MD (B))	H-1 8
I C 8 1 (SW (A))	C-2 3
I C 8 1 (SW (B))	I-2 3
I C 5 0 1	G-9
I C 5 0 2	E-5
I C 5 0 3	E-3
I C 5 0 4	G-5
I C 5 0 5	C-3
I C 5 6 1	E-8
I C 7 0 1	B-8
I C 8 5 1	F-1 2
I C 8 5 2	G-1 1
I C 8 5 3	H-1 3
I C 8 5 4	H-1 1
Q 5 1	F-1 6
Q 5 2	G-1 7
Q 5 3	F-1 7
Q 7 1 (MD (A))	B-1 7
Q 7 1 (MD (B))	G-1 7
Q 1 0 1	F-9
Q 1 0 2	C-4
Q 2 0 1	F-9
Q 2 0 2	C-3
Q 5 0 5	F-1 0
Q 5 0 6	F-5
Q 5 1 5	E-2
Q 5 1 6	E-2
Q 5 1 7	D-2
Q 5 2 2	C-4
Q 5 2 3	C-4
Q 5 2 4	F-3
Q 5 6 1	E-9
Q 5 6 2	F-9
Q 5 6 3	F-8
Q 5 8 1	D-7
Q 5 8 2	D-7
Q 5 8 3	D-6
Q 7 0 1	A-8
Q 7 0 2	A-9
Q 7 0 3	A-7
Q 7 0 4	B-7
Q 8 5 1	F-1 3
Q 8 5 2	G-1 2
Q 8 5 3	G-1 2
Q 8 5 4	G-1 0
Q 8 5 5	G-1 0
Q 8 5 6	H-1 0
Q 8 5 7	H-1 0

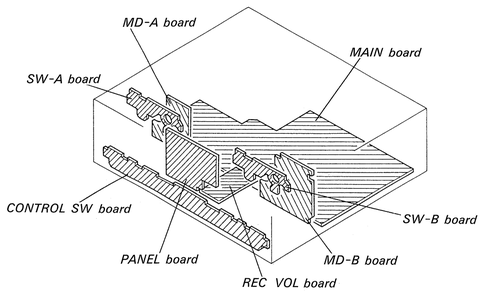
· ⟜ : parts extracted from the component side.

5-1. PRINTED WIRING BOARDS —Main Section—

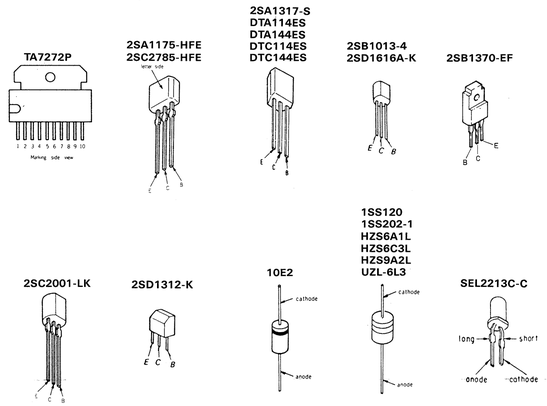



[REC VOL BOARD]
[MAIN BOARD]
[MD-A BOARD (1/2)]
[MD-B BOARD]
IC501 M40538PK A/B DECK SELECT
IC502 CXA1330S
IC503 CXA1398P REC EQ
IC504 μPD4052BC BIAS/TYP SWITCH
IC505 METER AMP
IC561 AMS DET
IC701 POWER
IC851 CONTROL
IC852 M50925-482 MECHANISM CONTROL
IC853 MOTOR AMP
IC854 MC14071BP COMPARATOR
IC81 NJL5165K ROTATION DET
IC852 (VOLTAGE)
IC502 (VOLTAGE)
SYSTEM CONTROL 2
SYSTEM CONTROL 1
TO DISPLAY BOARD CN831
TO CONTROL SW BOARD CN803
[SW (B) BOARD]
[SW (A) BOARD]
[MD-A BOARD (1/2)]
Note:
All capacitors are in μF unless otherwise noted. pF : μμF
50WV or less are not indicated except for electrolytics and tantalums.
All resistors are in Ω and ¼W or less unless otherwise specified.
△ : indicates tolerance.
: fusible resistor.
: B+Line
: B−Line
: adjustment for repair.
no mark: PLAY
Voltages are taken with a VOM (Input impedance 1 0MΩ).
Voltage variations may be noted due to normal production tolerances.
Signal path. : PB (DECK A) : PB (DECK B) : REC (DECK B)
Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

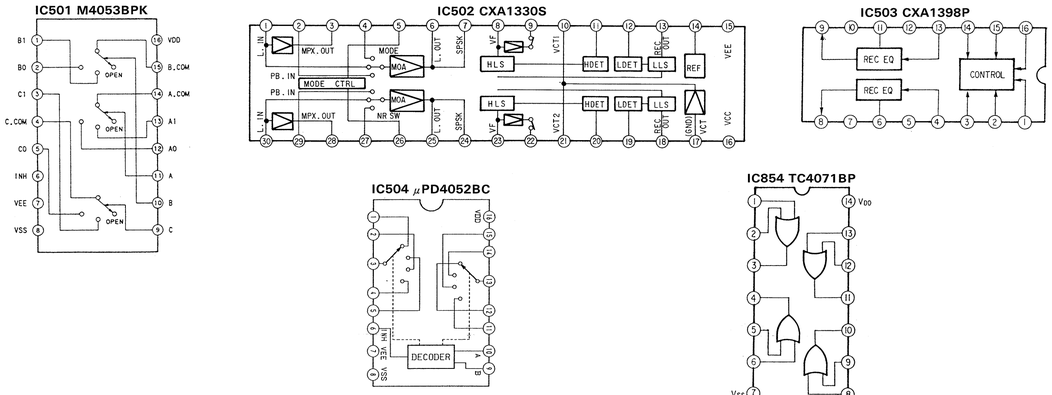
5-3. CIRCUIT BOARDS LOCATION



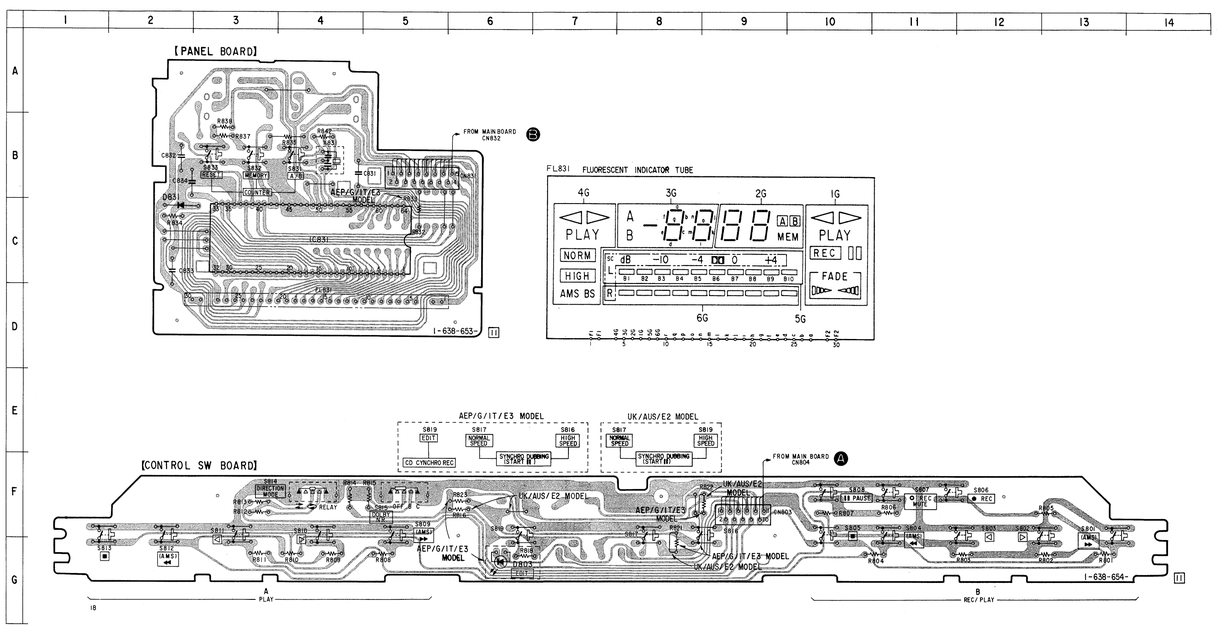
●Semiconductor Lead Layouts



● IC Block Diagrams



5-4. PRINTED WIRING BOARDS —Panel Section—



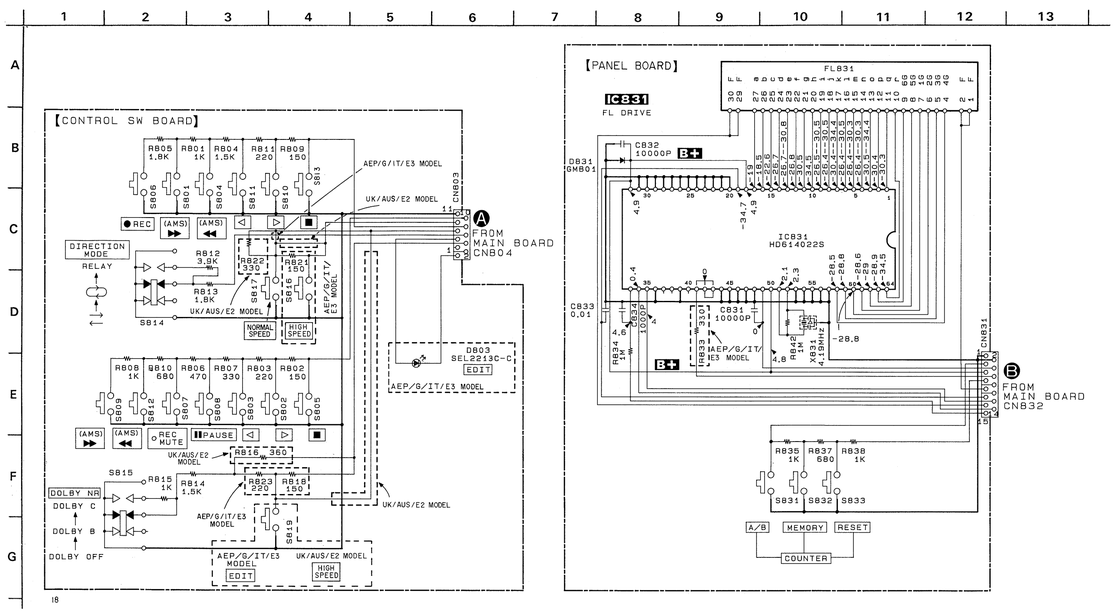
● SEMICONDUCTOR LOCATION

Ref. No.	Location
D803	G-6
D831	C-2
IC831	C-4

・ o—— : parts extracted from the component side.

G : Germany
IT : Italian
AUS : Australian

5-5. SCHEMATIC DIAGRAM —Panel Section—



Note :
- All capacitors are in μF unless otherwise noted. pF : μμF
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : indicates tolerance.
- B+ : B+Line
- Voltage is dc with respect to ground under no-signal(detuned) conditions.
- no mark:PLAY
- Voltages are taken with a VOM(Input impedance 10MΩ).
  Voltage variations may be noted due to normal production tolerances.

G : Germany
IT : Italian
AUS : Australian

SECTION 6
EXPLODED VIEWS

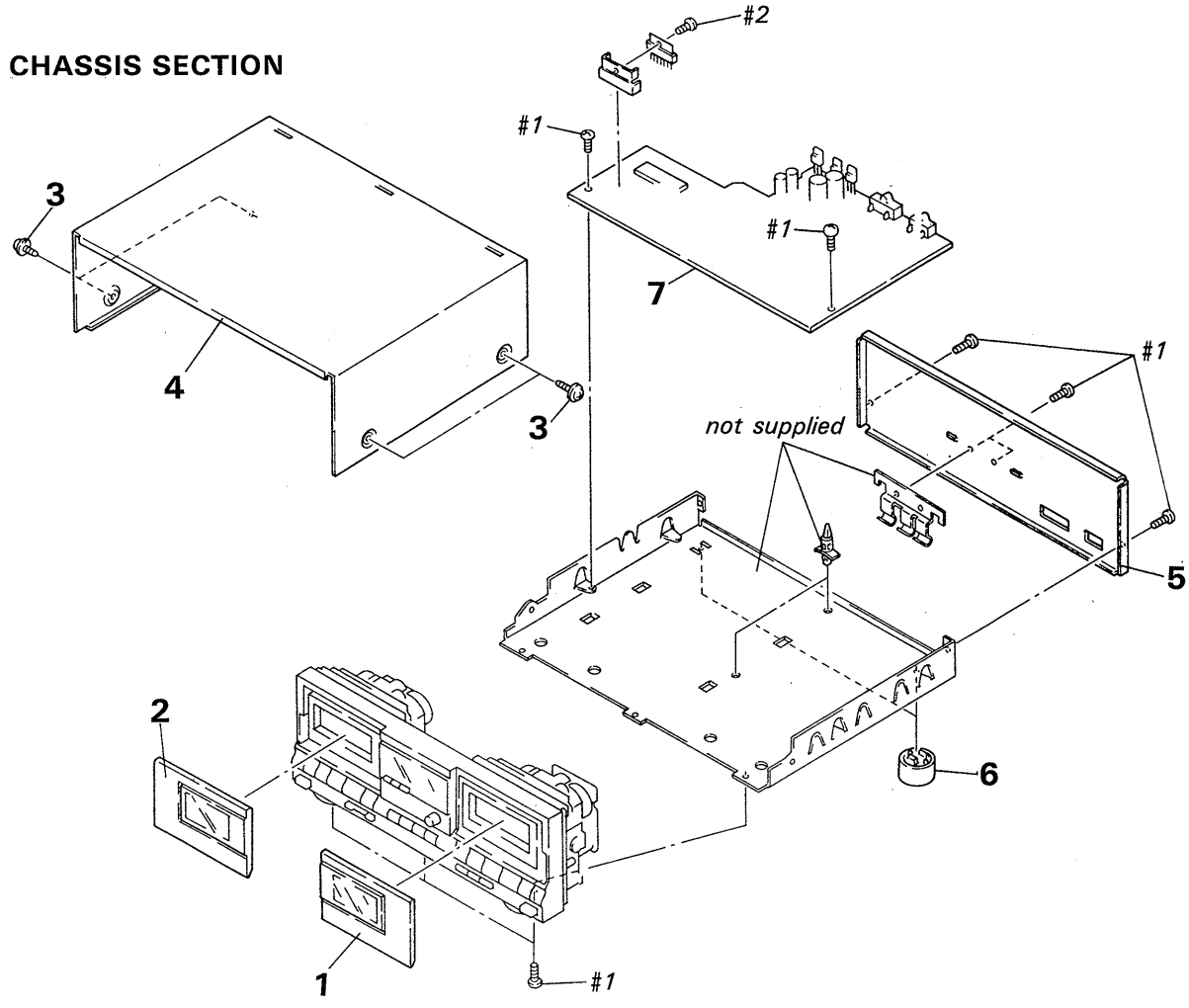
NOTE:

- −XX, −X mean standardized parts, so they may have some differnces from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE(WHITE)...(WHT)
  ↑ ↑
  Part's Color Cabinet's Color
- Hardware (#mark) list is given in the last of this parts list.

G : Germany
I T : Italian
AUS : Australian

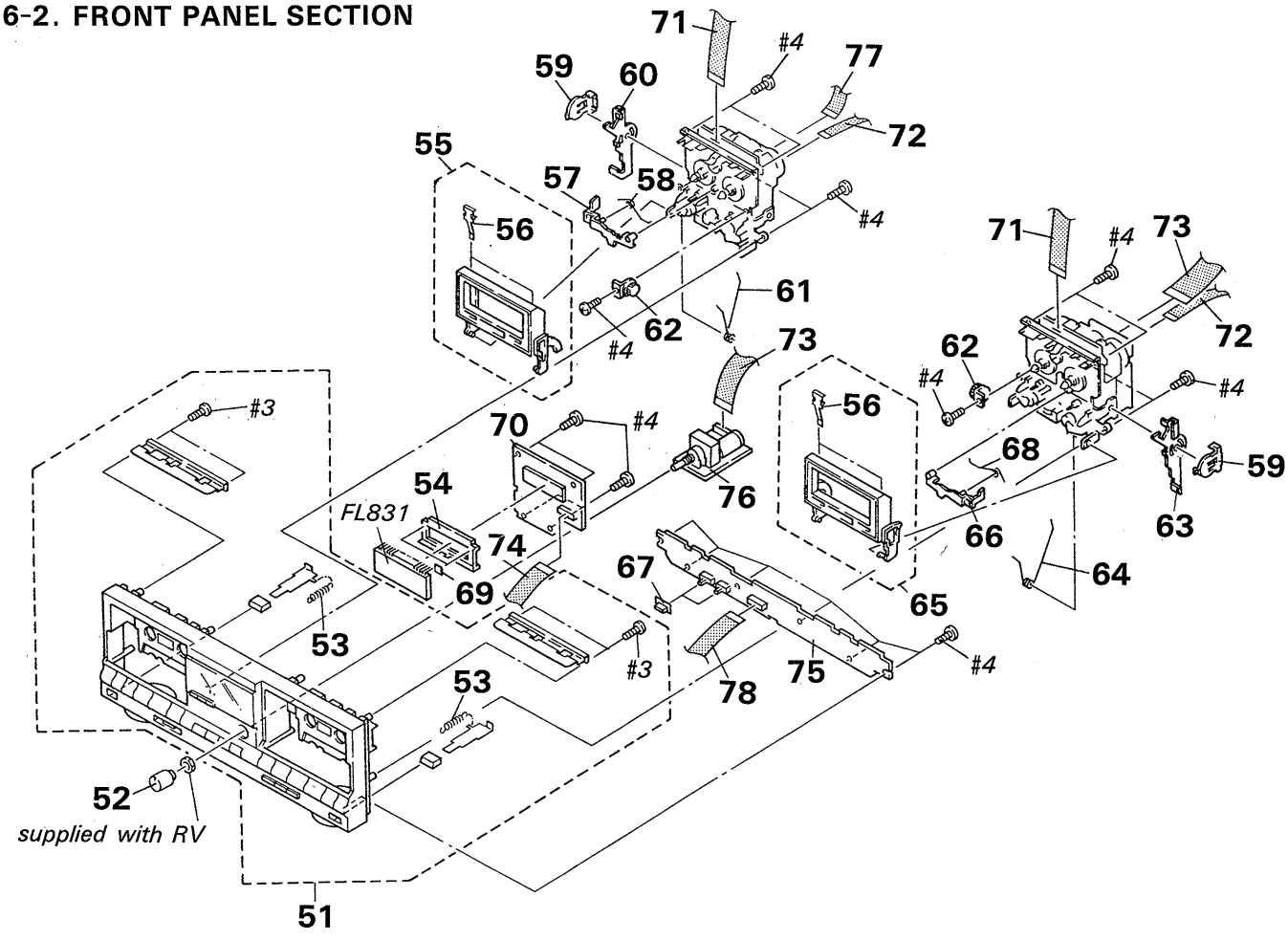
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

6-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	X-3362-796-1	LID (B) ASSY, CASSETTE	(IT, AUS)
1	X-3362-798-1	LID (B) ASSY, CASSETTE	(AEP, G, UK, E2/E3)
2	X-3362-226-1	LID (A) ASSY, CASSETTE	(AEP, G, UK, E2/E3)
2	X-3362-797-1	LID (A) ASSY, CASSETTE	(IT, AUS)
3	3-363-099-01	SCREW (CASE +3X8 TP2)	
4	* 4-939-803-71	CASE	
5	* 3-362-787-21	PANEL, BACK	(AEP, IT, UK, AUS, E2/E3)
5	* 3-362-787-13	PANEL, BACK	(G)
6	4-931-169-01	FOOT	
7	* A-2006-428-A	MAIN BOARD, COMPLETE	(AEP, G, IT, E3)
7	* A-2006-432-A	MAIN BOARD, COMPLETE	(UK, AUS, E2)

6-2. FRONT PANEL SECTION

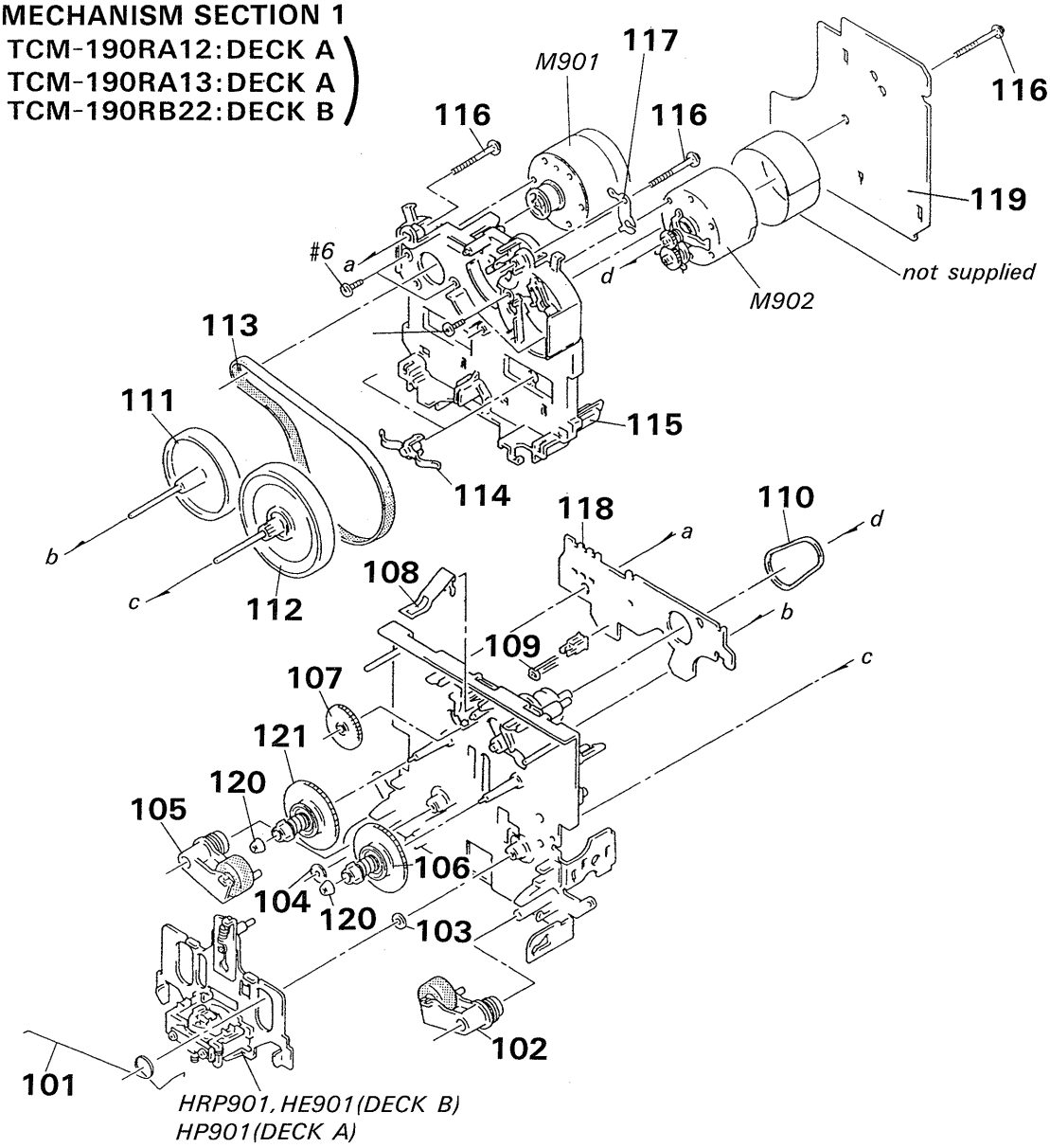


Ref. No.	Part No.	Description	Remark
51	X-3362-800-1	PANEL ASSY, FRONT (AEP, G, E3)	
51	X-3362-801-1	PANEL ASSY, FRONT (UK, AUS, E2)	
51	X-3362-799-1	PANEL ASSY, FRONT (IT)	
52	3-349-039-01	KNOB (VOL)	
53	3-662-752-21	SPRING, TENSION	
54	* 4-933-646-01	HOLDER (TC), FL TUBE	
55	X-3340-194-1	HOLDER (L) ASSY, CASSETTE	
56	3-308-823-11	SPRING	
57	3-354-955-01	LEVER (EJ SAFTY LEVER L)	
58	3-354-961-01	SPRING (EJ SAFTY SPRING L)	
59	3-354-957-01	JOINT (LOCK LEVER)	
60	* 3-363-638-01	LEVER (LOCK LEVER L)	
61	3-354-959-01	SPRING (LOADING L), TORSION	
62	3-354-963-01	DAMPER	
63	* 3-363-639-01	LEVER (LOCK LEVER R)	

Ref. No.	Part No.	Description	Remark
64	3-354-960-01	SPRING (LOADING R), TORSION	
65	X-3340-195-1	HOLDER (R) ASSY, CASSETTE	
66	3-354-956-01	LEVER (EJ SAFTY LEVER R)	
67	3-363-640-01	KNOB (SLIDE)	
68	3-354-962-01	SPRING (EJ SAFTY SPRING R)	
69	* 4-921-941-01	CUSHION (FL)	
70	* A-2006-429-A	PANEL BOARD, COMPLETE	
71	* 1-574-727-11	WIRE, FLAT TYPE (9 CORE)	
72	1-575-220-11	WIRE, FLAT TYPE (5 CORE)	
73	1-590-036-11	WIRE, FLAT TYPE (13 CORE)	
74	1-575-217-11	WIRE, FLAT TYPE (15 CORE)	
75	* 1-638-654-11	CONTROL SW BOARD	
76	* 1-638-655-11	REC VOL BOARD	
77	1-575-731-11	WIRE, FLAT TYPE (7 CORE)	
78	1-590-218-11	WIRE, FLAT TYPE (11 CORE)	
FL831	1-519-570-11	INDICATOR TUBE, FLUORESCENT	

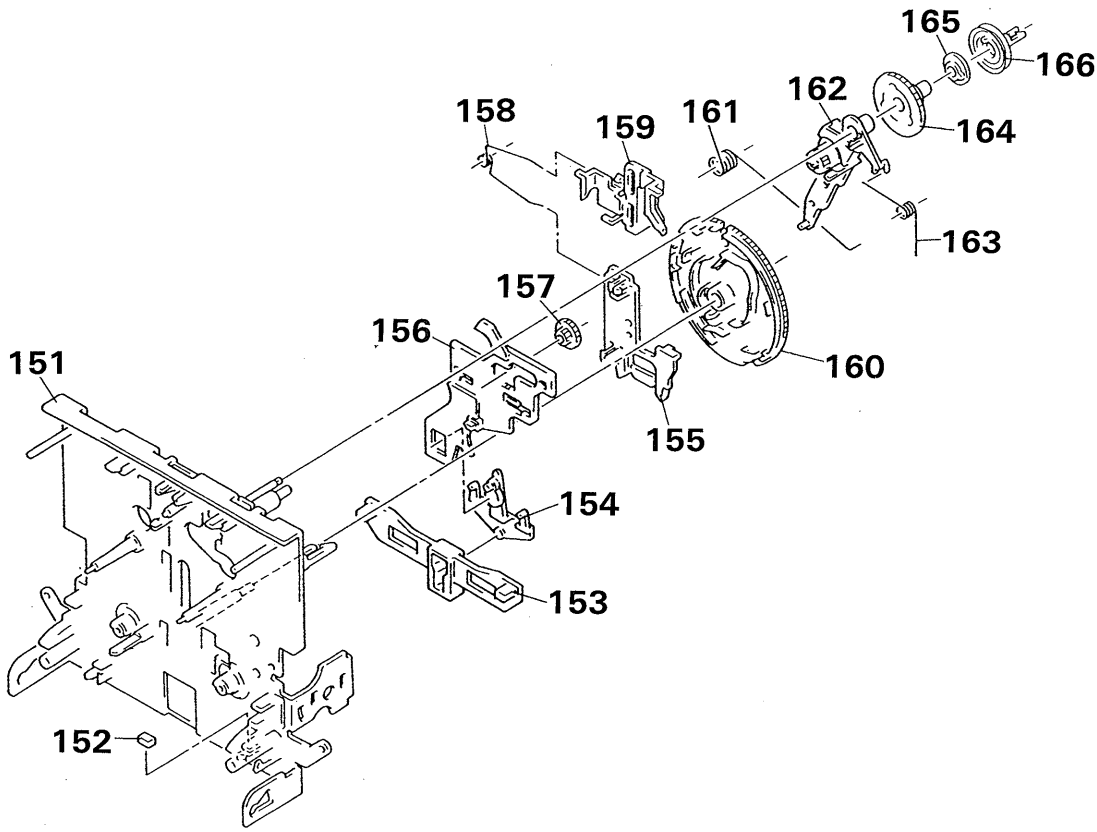
6-3. MECHANISM SECTION 1

(TCM-190RA12:DECK A
or TCM-190RA13:DECK A
TCM-190RB22:DECK B)



Ref. No.	Part No.	Description	Remark
101	3-359-455-01	SPRING, TORSION	
102	X-3359-408-1	LEVER (PINCH LEVER FWD) ASSY	
103	3-356-713-01	WASHER	
104	3-356-714-01	WASHER	
105	X-3359-409-1	LEVER (PINCH LEVER REV) ASSY	
106	X-3359-404-1	TABLE ASSY, REEL	
107	3-359-424-01	GEAR (REV GEAR)	
108	3-359-430-01	SPRING(CASSETTE RETAINER), LEAF	
109	3-343-419-01	HOLDER (S SENSER A)	
110	3-359-466-01	BELT (FR), SQUARE	
111	X-3359-410-1	FLYWHEEL (REV) ASSY	
112	X-3359-406-1	FLYWHEEL (FWD) COMPLETE ASSY	
113	3-359-417-01	BELT (FLAT), CAPSTAN	
114	3-575-321-00	RETAINER, THRUST, CAPSTAN	
115	* 3-359-436-01	BASE (THRUST RETAINER), FITTING	
116	3-359-414-01	SCREW (+PTPWH 2X23)	
117	3-359-450-01	PLATE, GROUND	
118	* 1-634-841-11	SW-A BOARD	
118	* 1-634-841-11	SW-B BOARD	
119	* 1-634-843-11	MD-B BOARD (DECK B)	
120	3-362-308-01	CAP (REEL)	
121	X-3362-078-1	TABLE ASSY (B), REEL	
HP901	A-2003-418-A	BASE ASSY, HEAD (DECK A)	(TCM-190RA12)
HP901	A-2003-867-A	BASE ASSY, HEAD (DECK A)	(TCM-190RA13)
HRP901, HE901	A-2003-477-A	BASE ASSY, HEAD (DECK B)	
M901	X-3359-417-1	MOTOR (CAPSTAN) ASSY	
M902	A-2003-474-A	MOTOR (REEL) ASSY	

6-4. MECHANISM SECTION 2



Ref. No.	Part No.	Description	Remark
151	X-3359-415-1	CHASSIS ASSY, MECHANICAL	
152	3-359-469-01	SPACER	
153	* 3-359-425-01	SLIDER (REVERSE SLIDER)	
154	3-359-426-01	LEVER (REVERSE LEVER)	
155	* 3-359-427-01	SLIDER (LEVERSE SLIDER)	
156	* 3-359-415-01	SLIDER (TRIGGER SLIDER)	
157	3-359-448-01	GEAR (TRIGGER)	
158	3-359-454-01	SPRING, TORSION	
159	3-359-429-01	SLIDER (BRAKE PLATE)	
160	3-359-420-01	GEAR (CAM GEAR)	
161	3-359-456-01	SPRING(TRIGGER SPRING), TORSION	
162	X-3359-405-1	LEVER (FR ARM) ASSY	
163	3-359-453-01	SPRING (FR ARM), TORSION	
164	3-359-419-01	GEAR (FR GEAR)	
165	3-359-421-01	CLUTCH (REEL DISK)	
166	3-359-418-01	PULLEY (FR PULLEY)	

SECTION 7
ELECTRICAL PARTS LIST

MAIN | PANEL | CONTROL SW | REC VOL

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms

METAL : Metal-film resistor
METAL OXIDE : Metal Oxide-film resistor
F : nonflammable

- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA··· : μA···, uPA··· : μPA···,
  uPB··· : μPB···, uPC··· : μPC···,
  uPD··· : μPD···
- CAPACITORS
  uF : μF
- COILS
  uH : μH

G : Germany
IT : Italian
AUS : Australian

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref. No.	Part No.	Description			Remark
	* A-2006-428-A	MAIN BOARD, COMPLETE (AEP, G, IT, E3)			
	* A-2006-432-A	MAIN BOARD, COMPLETE (UK, AUS, E2)			
		**********			
	* A-2006-429-A	PANEL BOARD, COMPLETE			
		**********			
	* 1-638-654-11	CONTROL SW BOARD			
		**********			
	* 1-638-655-11	REC VOL BOARD			
		**********			
	* 4-921-941-01	CUSHION (FL)			
	* 4-933-646-01	HOLDER (TC), FL TUBE			
	* 4-942-204-01	PLATE, GROUND			
	7-682-547-04	SCREW +BVTT 3X6 (S)			
		< CAPACITOR >			
C101	1-136-157-00	FILM	0.022uF	5% 50V	
C110	1-126-163-11	ELECT	0.68uF	20% 50V	
C111	1-126-163-11	ELECT	0.68uF	20% 50V	
C112	1-130-475-00	MYLAR	0.0022uF	5% 50V	
C113	1-130-475-00	MYLAR	0.0022uF	5% 50V	
C114	1-136-161-00	FILM	0.047uF	5% 50V	
C115	1-130-475-00	MYLAR	0.0022uF	5% 50V	
C116	1-126-163-11	ELECT	4.7uF	20% 50V	
C132	1-126-161-11	ELECT	2.2uF	20% 50V	
C151	1-126-059-11	ELECT	10uF	20% 50V	
C152	1-126-162-11	ELECT	3.3uF	20% 50V	
C153	1-126-300-11	ELECT	0.47uF	20% 50V	
C201	1-136-157-00	FILM	0.022uF	5% 50V	
C210	1-126-163-11	ELECT	0.68uF	20% 50V	
C211	1-126-163-11	ELECT	0.68uF	20% 50V	
C212	1-130-475-00	MYLAR	0.0022uF	5% 50V	
C213	1-130-475-00	MYLAR	0.0022uF	5% 50V	
C214	1-136-161-00	FILM	0.047uF	5% 50V	
C215	1-130-475-00	MYLAR	0.0022uF	5% 50V	
C216	1-126-163-11	ELECT	4.7uF	20% 50V	

Ref. No.	Part No.	Description			Remark
C232	1-126-161-11	ELECT	2.2uF	20% 50V	
C251	1-126-059-11	ELECT	10uF	20% 50V	
C252	1-126-162-11	ELECT	3.3uF	20% 50V	
C253	1-126-300-11	ELECT	0.47uF	20% 50V	
C521	1-126-161-11	ELECT	2.2uF	20% 50V	
C551	1-126-300-11	ELECT	0.47uF	20% 50V	
C552	1-126-059-11	ELECT	10uF	20% 50V	
C553	1-126-300-11	ELECT	0.47uF	20% 50V	
C561	1-126-161-11	ELECT	2.2uF	20% 50V	
C563	1-136-157-00	FILM	0.022uF	5% 50V	
C565	1-126-163-11	ELECT	0.68uF	20% 50V	
C567	1-126-161-11	ELECT	2.2uF	20% 50V	
C568	1-126-161-11	ELECT	2.2uF	20% 50V	
C581	1-126-101-11	ELECT	220uF	20% 10V	
C582	1-126-101-11	ELECT	220uF	20% 10V	
C701	1-124-887-00	ELECT	3300uF	20% 16V	
C702	1-124-887-00	ELECT	3300uF	20% 6V	
C704	1-124-910-11	ELECT	47uF	20% 50V	
C705	1-124-910-11	ELECT	47uF	20% 50V	
C706	1-124-910-11	ELECT	47uF	20% 50V	
C707	1-126-161-11	ELECT	2.2uF	20% 50V	
C708	1-124-472-11	ELECT	470uF	20% 10V	
C709	1-126-301-11	ELECT	1uF	20% 50V	
C710	1-126-301-11	ELECT	1uF	20% 50V	
C711	1-126-867-11	ELECT	33uF	20% 50V	
C712	1-126-161-11	ELECT	2.2uF	20% 50V	
C713	1-161-379-00	CERAMIC	0.01uF	30% 25V	
C831	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C832	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C833	1-161-379-00	CERAMIC	0.01uF	20% 25V	

MAIN | PANEL | CONTROL SW | REC VOL

Ref. No.	Part No.	Description				Remark
C834	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C851	1-164-159-11	CERAMIC	0.1uF		50V	
C852	1-164-159-11	CERAMIC	0.1uF		50V	
C853	1-126-059-11	ELECT	10uF	20%	50V	
C854	1-126-059-11	ELECT	10uF	20%	50V	
C855	1-124-994-11	ELECT	100uF	20%	10V	
C856	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C857	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C858	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C859	1-124-994-11	ELECT	100uF	20%	10V	
C860	1-164-159-11	CERAMIC	0.1uF		50V	
		< CONNECTOR >				
CN501	* 1-568-824-11	SOCKET, CONNECTOR 5P				
CN502	* 1-568-824-11	SOCKET, CONNECTOR 5P				
CN503	* 1-568-828-11	SOCKET, CONNECTOR 9P				
CN504	* 1-568-828-11	SOCKET, CONNECTOR 9P				
CN505	* 1-566-858-11	SOCKET, CONNECTOR 11P (SYSTEM CONTROL 2)				
CN542	* 1-568-832-11	SOCKET, CONNECTOR 13P				
CN701	* 1-566-859-11	SOCKET, CONNECTOR 15P (SYSTEM CONTROL 1)				
CN801	* 1-568-832-11	SOCKET, CONNECTOR 13P				
CN802	* 1-568-826-11	SOCKET, CONNECTOR 7P				
CN803	* 1-568-854-11	SOCKET, CONNECTOR 11P				
CN804	* 1-568-830-11	SOCKET, CONNECTOR 11P				
CN831	* 1-568-834-11	SOCKET, CONNECTOR 15P				
CN832	* 1-568-834-11	SOCKET, CONNECTOR 15P				
		< DIODE >				
D131	8-719-912-20	DIODE 1SS120				
D231	8-719-912-20	DIODE 1SS120				
D561	8-719-912-20	DIODE 1SS120				
D581	8-719-933-54	DIODE HZS9A2L				
D701	8-719-200-77	DIODE 10E2N				
D702	8-719-200-77	DIODE 10E2N				
D703	8-719-200-77	DIODE 10E2N				
D704	8-719-200-77	DIODE 10E2N				
D705	8-719-933-33	DIODE HZS6A1L				
D706	8-719-933-33	DIODE HZS6A1L				
D707	8-719-000-54	DIODE UZL-6L3				
D708	8-719-200-77	DIODE 10E2N				
D709	8-719-200-77	DIODE 10E2N				
D710	8-719-912-20	DIODE 1SS120				
D711	8-719-912-20	DIODE 1SS120				
D803	8-719-302-23	LED SEL2213C-C (AEP, G, IT, E3)				
D831	8-719-912-20	DIODE 1SS120				
D851	8-719-912-20	DIODE 1SS120				
D852	8-719-912-20	DIODE 1SS120				
D853	8-719-912-20	DIODE 1SS120				
D854	8-719-933-41	DIODE HZS6C3L				
D855	8-719-912-20	DIODE 1SS120				
D856	8-719-933-41	DIODE HZS6C3L				
		< INDICATOR TUBE >				
FL831	1-519-570-11	INDICATOR TUBE, FLUORESCENT				
		< IC >				
IC501	8-759-140-53	IC uPD4053BC				
IC502	8-752-036-34	IC CXA1330S				
IC503	8-752-039-24	IC CXA1398P				
IC504	8-759-152-34	IC uPD4052BC-A				
IC505	8-759-945-58	IC RC4558P				
IC561	8-759-945-58	IC RC4558P				
IC701	8-759-945-58	IC RC4558P				
IC831	8-759-321-92	IC HD614022S				
IC851	8-759-636-60	IC M50944-168SP				
IC852	8-759-635-94	IC M50925SP-482SP				
IC853	8-759-207-05	IC TA7272P				
IC854	8-759-240-71	IC TC4071BP				
		< FILTER >				
LPF101	1-236-087-11	FILTER, LOW PASS				
LPF201	1-236-087-11	FILTER, LOW PASS				
		< TRANSISTOR >				
Q101	8-729-900-80	TRANSISTOR DTC114ES				
Q102	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q201	8-729-900-80	TRANSISTOR DTC114ES				
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q505	8-729-900-61	TRANSISTOR DTA114ES				
Q506	8-729-900-61	TRANSISTOR DTA114ES				
Q515	8-729-900-65	TRANSISTOR DTA144ES				
Q516	8-729-900-89	TRANSISTOR DTC144ES				
Q517	8-729-900-65	TRANSISTOR DTA144ES				
Q522	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q523	8-729-900-61	TRANSISTOR DTA114ES				
Q524	8-729-900-61	TRANSISTOR DTA114ES				
Q561	8-729-900-61	TRANSISTOR DTA114ES				
Q562	8-729-900-80	TRANSISTOR DTC114ES				
Q563	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q581	8-729-900-65	TRANSISTOR DTA144ES				
Q582	8-729-900-65	TRANSISTOR DTA144ES				
Q583	8-729-900-89	TRANSISTOR DTC144ES				
Q701	8-729-924-90	TRANSISTOR 2SB1370-EF				
Q702	8-729-111-55	TRANSISTOR 2SD1312-K				

MAIN PANEL CONTROL SW REC VOL

Ref. No.	Part No.	Description			Remark
Q703	8-729-924-90	TRANSISTOR 2SB1370-EF			
Q704	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q851	8-729-900-80	TRANSISTOR DTC114ES			
Q852	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q853	8-729-900-80	TRANSISTOR DTC114ES			
Q854	8-729-900-61	TRANSISTOR DTA114ES			
Q855	8-729-900-80	TRANSISTOR DTC114ES			
Q856	8-729-801-84	TRANSISTOR 2SB1013-4			
Q857	8-729-801-84	TRANSISTOR 2SB1013-4			
		< RESISTOR >			
R103	1-249-421-11	CARBON	2.2K	5% 1/4W	
R105	1-247-887-00	CARBON	220K	5% 1/4W	
R106	1-249-423-11	CARBON	3.3K	5% 1/4W	
R110	1-249-417-11	CARBON	1K	5% 1/4W	
R111	1-249-428-11	CARBON	8.2K	5% 1/4W	
R112	1-249-423-11	CARBON	3.3K	5% 1/4W	
R113	1-247-846-11	CARBON	4.3K	5% 1/4W	
R114	1-247-822-11	CARBON	430	5% 1/4W	
R115	1-249-434-11	CARBON	27K	5% 1/4W	
R135	1-249-429-11	CARBON	10K	5% 1/4W	
R136	1-249-421-11	CARBON	2.2K	5% 1/4W	
R137	1-249-425-11	CARBON	4.7K	5% 1/4W	
R138	1-249-417-11	CARBON	1K	5% 1/4W	
R140	1-249-436-11	CARBON	39K	5% 1/4W	
R141	1-249-432-11	CARBON	18K	5% 1/4W	
R142	1-249-410-11	CARBON	270	5% 1/4W	
R151	1-249-423-11	CARBON	3.3K	5% 1/4W	
R152	1-249-426-11	CARBON	5.6K	5% 1/4W	
R203	1-249-421-11	CARBON	2.2K	5% 1/4W	
R205	1-247-887-00	CARBON	220K	5% 1/4W	
R206	1-249-423-11	CARBON	3.3K	5% 1/4W	
R210	1-249-417-11	CARBON	1K	5% 1/4W	
R211	1-249-428-11	CARBON	8.2K	5% 1/4W	
R212	1-249-423-11	CARBON	3.3K	5% 1/4W	
R213	1-247-846-11	CARBON	4.3K	5% 1/4W	
R214	1-247-822-11	CARBON	430	5% 1/4W	
R215	1-249-417-11	CARBON	1K	5% 1/4W	
R235	1-249-429-11	CARBON	10K	5% 1/4W	
R236	1-249-421-11	CARBON	2.2K	5% 1/4W	
R237	1-249-425-11	CARBON	4.7K	5% 1/4W	
R238	1-249-417-11	CARBON	1K	5% 1/4W	
R240	1-249-436-11	CARBON	39K	5% 1/4W	
R241	1-249-432-11	CARBON	18K	5% 1/4W	
R242	1-249-410-11	CARBON	270	5% 1/4W	
R251	1-249-423-11	CARBON	3.3K	5% 1/4W	

Ref. No.	Part No.	Description			Remark
R252	1-249-426-11	CARBON	5.6K	5% 1/4W	
R510	1-249-429-11	CARBON	10K	5% 1/4W	
R511	1-249-441-11	CARBON	100K	5% 1/4W	
R512	1-249-423-11	CARBON	3.3K	5% 1/4W	
R521	1-249-421-11	CARBON	2.2K	5% 1/4W	
R533	1-249-429-11	CARBON	10K	5% 1/4W	
R541	1-249-435-11	CARBON	33K	5% 1/4W	
R542	1-249-435-11	CARBON	33K	5% 1/4W	
R543	1-249-421-11	CARBON	33K	5% 1/4W	
R552	1-249-429-11	CARBON	10K	5% 1/4W	
R553	1-249-429-11	CARBON	10K	5% 1/4W	
R554	1-247-864-11	CARBON	24K	5% 1/4W	
R555	1-247-862-11	CARBON	20K	5% 1/4W	
R556	1-249-441-11	CARBON	100K	5% 1/4W	
R557	1-247-862-11	CARBON	20K	5% 1/4W	
R558	1-247-864-11	CARBON	24K	5% 1/4W	
R561	1-247-887-00	CARBON	220K	5% 1/4W	
R562	1-249-429-11	CARBON	10K	5% 1/4W	
R563	1-249-441-11	CARBON	100K	5% 1/4W	
R564	1-249-428-11	CARBON	8.2K	5% 1/4W	
R565	1-249-423-11	CARBON	3.3K	5% 1/4W	
R566	1-249-441-11	CARBON	100K	5% 1/4W	
R567	1-249-417-11	CARBON	1K	5% 1/4W	
R568	1-249-441-11	CARBON	100K	5% 1/4W	
R569	1-249-429-11	CARBON	10K	5% 1/4W	
R570	1-249-441-11	CARBON	100K	5% 1/4W	
R571	1-249-417-11	CARBON	1K	5% 1/4W	
R572	1-249-437-11	CARBON	47K	5% 1/4W	
R581	1-249-429-11	CARBON	10K	5% 1/4W	
R582	1-249-433-11	CARBON	22K	5% 1/4W	
R583	1-249-429-11	CARBON	10K	5% 1/4W	
R588	1-249-437-11	CARBON	47K	5% 1/4W	
R701	1-249-420-11	CARBON	1.8K	5% 1/4W	
R702	1-249-427-11	CARBON	6.8K	5% 1/4W	
R703	1-249-419-11	CARBON	1.5K	5% 1/4W	
R704	1-249-429-11	CARBON	10K	5% 1/4W	
R705	1-249-419-11	CARBON	1.5K	5% 1/4W	
R706	1-249-427-11	CARBON	6.8K	5% 1/4W	
R707	1-249-427-11	CARBON	6.8K	5% 1/4W	
R708	1-249-405-11	CARBON	100	5% 1/4W	
R709	1-249-417-11	CARBON	1K	5% 1/4W	
R710	1-249-420-11	CARBON	1.8K	5% 1/4W	
R711	1-249-405-11	CARBON	100	5% 1/4W	
R712	1-249-422-11	CARBON	2.7K	5% 1/4W	
R801	1-249-417-11	CARBON	1K	5% 1/4W	
R802	1-249-407-11	CARBON	150	5% 1/4W	
R803	1-249-409-11	CARBON	220	5% 1/4W	
R804	1-249-419-11	CARBON	1.5K	5% 1/4W	
R805	1-249-420-11	CARBON	1.8K	5% 1/4W	

MAIN PANEL CONTROL SW REC VOL

Ref. No.	Part No.	Description				Remark
R806	1-249-413-11	CARBON	470	5%	1/4W	
R807	1-249-411-11	CARBON	330	5%	1/4W	
R808	1-249-417-11	CARBON	1K	5%	1/4W	
R809	1-249-407-11	CARBON	150	5%	1/4W	
R810	1-249-415-11	CARBON	680	5%	1/4W	
R811	1-249-409-11	CARBON	220	5%	1/4W	
R812	1-249-424-11	CARBON	3.9K	5%	1/4W	
R813	1-249-420-11	CARBON	1.8K	5%	1/4W	
R814	1-249-419-11	CARBON	1.5K	5%	1/4W	
R815	1-249-417-11	CARBON	1K	5%	1/4W	
R816	1-247-820-11	CARBON	360	5%	1/4W	(UK, AUS, E2)
R818	1-249-407-11	CARBON	150	5%	1/4W	(AEP, G, IT, E3)
R821	1-249-407-11	CARBON	150	5%	1/4W	(AEP, G, IT, E3)
R822	1-249-411-11	CARBON	330	5%	1/4W	(UK, AUS, E2)
R823	1-249-409-11	CARBON	220	5%	1/4W	(AEP, G, IT, E3)
R831	1-249-411-11	CARBON	330	5%	1/4W	(AEP, G, IT, E3)
R833	1-249-411-11	CARBON	330	5%	1/4W	(AEP, G, IT, E3)
R834	1-247-903-00	CARBON	1M	5%	1/4W	
R835	1-249-417-11	CARBON	1K	5%	1/4W	
R837	1-249-415-11	CARBON	680	5%	1/4W	
R838	1-249-417-11	CARBON	1K	5%	1/4W	
R842	1-247-903-00	CARBON	1M	5%	1/4W	
R845	1-249-435-11	CARBON	33K	5%	1/4W	
R846	1-249-435-11	CARBON	33K	5%	1/4W	
R850	1-249-425-11	CARBON	4.7K	5%	1/4W	
R851	1-249-393-11	CARBON	10	5%	1/4W	
R852	1-249-435-11	CARBON	33K	5%	1/4W	
R853	1-249-421-11	CARBON	2.2K	5%	1/4W	
R854	1-249-421-11	CARBON	2.2K	5%	1/4W	
R855	1-249-421-11	CARBON	2.2K	5%	1/4W	
R856	1-249-421-11	CARBON	2.2K	5%	1/4W	
R857	1-249-435-11	CARBON	33K	5%	1/4W	
R858	1-249-432-11	CARBON	18K	5%	1/4W	
R859	1-249-433-11	CARBON	22K	5%	1/4W	
R860	1-249-423-11	CARBON	3.3K	5%	1/4W	
R861	1-247-903-00	CARBON	1M	5%	1/4W	
R862	1-247-903-00	CARBON	1M	5%	1/4W	
R863	1-249-434-11	CARBON	27K	5%	1/4W	
R864	1-249-434-11	CARBON	27K	5%	1/4W	
R865	1-249-405-11	CARBON	100	5%	1/4W	
R866	1-247-862-11	CARBON	20K	5%	1/4W	
R867	1-249-425-11	CARBON	4.7K	5%	1/4W	
R868	1-249-425-11	CARBON	4.7K	5%	1/4W	
R869	1-247-862-11	CARBON	20K	5%	1/4W	
R870	1-249-405-11	CARBON	100	5%	1/4W	
R871	1-247-872-11	CARBON	51K	5%	1/4W	
R872	1-247-872-11	CARBON	51K	5%	1/4W	
R873	1-249-437-11	CARBON	47K	5%	1/4W	
R874	1-247-866-11	CARBON	30K	5%	1/4W	
R875	1-247-866-11	CARBON	30K	5%	1/4W	
R876	1-249-437-11	CARBON	47K	5%	1/4W	
R877	1-247-872-11	CARBON	51K	5%	1/4W	
R878	1-247-872-11	CARBON	51K	5%	1/4W	
R879	1-249-432-11	CARBON	18K	5%	1/4W	
R881	1-247-895-00	CARBON	470K	5%	1/4W	
R882	1-247-895-00	CARBON	470K	5%	1/4W	
R883	1-247-895-00	CARBON	470K	5%	1/4W	
R884	1-247-895-00	CARBON	470K	5%	1/4W	
R886	1-249-432-11	CARBON	18K	5%	1/4W	
R887	1-249-415-11	CARBON	680	5%	1/4W	
R888	1-249-415-11	CARBON	680	5%	1/4W	
R889	1-249-429-11	CARBON	10K	5%	1/4W	
R890	1-249-429-11	CARBON	10K	5%	1/4W	
R891	1-249-433-11	CARBON	22K	5%	1/4W	
R893	1-249-435-11	CARBON	33K	5%	1/4W	
R894	1-249-435-11	CARBON	33K	5%	1/4W	
R895	1-249-435-11	CARBON	33K	5%	1/4W	
R896	1-249-435-11	CARBON	33K	5%	1/4W	
R898	1-249-435-11	CARBON	33K	5%	1/4W	

< VARIABLE RESISTOR >

RV101	1-238-600-11	RES, ADJ, CARBON 10K
RV201	1-238-600-11	RES, ADJ, CARBON 10K
RV541	1-241-493-11	RES, VAR, CARBON 20K/20K (REC LEVEL)

< SWITCH >

S801	1-554-303-21	SWITCH, TACTILE (FF AMS)
S802	1-554-303-21	SWITCH, TACTILE (FORWARD)
S803	1-554-303-21	SWITCH, TACTILE (REVERSE)
S804	1-554-303-21	SWITCH, TACTILE (FR AMS)
S805	1-554-303-21	SWITCH, TACTILE (STOP)
S806	1-554-303-21	SWITCH, TACTILE (REC)
S807	1-554-303-21	SWITCH, TACTILE (REC MUTE)
S808	1-554-303-21	SWITCH, TACTILE (PAUSE)
S809	1-554-303-21	SWITCH, TACTILE (FF AMS)
S810	1-554-303-21	SWITCH, TACTILE (FORWARD)
S811	1-554-303-21	SWITCH, TACTILE (REVERSE)
S812	1-554-303-21	SWITCH, TACTILE (FR AMS)
S813	1-554-303-21	SWITCH, TACTILE (STOP)
S814	1-571-452-11	SWITCH, SLIDE (DIRECTION MODE)
S815	1-571-452-11	SWITCH, SLIDE (DOLBY NR)
S816	1-554-303-21	SWITCH, TACTILE (NORMAL SPEED) (AEP, G, IT, E3)
S817	1-554-303-21	SWITCH, TACTILE (HIGH SPEED) (AEP, G, IT, E3) / (NORMAL SPEED) (UK, AUS, E2)
S819	1-554-303-21	SWITCH, TACTILE (EDIT) (AEP, G, IT, E3)/ (HIGH SPEED) (UK, AUS, E2)

MAIN | PANEL | CONTROL SW | REC VOL | MD-A | MD-B

Ref. No.	Part No.	Description				Remark
S831	1-554-303-21	SWITCH, TACTILE (A/B)				
S832	1-554-303-21	SWITCH, TACTILE (MEMORY)				
S833	1-554-303-21	SWITCH, TACTILE (RESET)				
		< CERAMIC >				
X831	1-567-775-11	VIBRATOR, CERAMIC 4.19MHz				
X851	1-577-358-21	VIBRATOR, CERAMIC 4MHz				
X852	1-577-358-21	VIBRATOR, CERAMIC 4MHz				
**********						
*	1-634-840-11	MD-A BOARD (DECK A)				
		**********				
		< CAPACITOR >				
C11	1-110-342-11	MYLAR	390PF	5%	50V	
C12	1-136-157-00	FILM	0.022uF	5%	50V	
C13	1-124-282-00	ELECT	22uF	20%	25V	
C21	1-110-342-11	MYLAR	390PF	5%	50V	
C22	1-136-157-00	FILM	0.022uF	5%	50V	
C23	1-124-282-00	ELECT	22uF	20%	25V	
C31	1-124-443-00	ELECT	100uF	20%	10V	
C32	1-124-443-00	ELECT	100uF	20%	10V	
C71	1-123-875-11	ELECT	10uF	20%	50V	
C72	1-123-875-11	ELECT	10uF	20%	50V	
		< CONNECTOR >				
CNP31	* 1-568-824-11	SOCKET, CONNECTOR 5P				
CNP32	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P				
CNP71	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P				
CNP72	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P				
CNP73	* 1-568-826-11	SOCKET, CONNECTOR 7P				
		< IC >				
IC31	8-759-111-44	IC uPC4570C-1				
		< TRANSISTOR >				
Q71	8-729-820-16	TRANSISTOR 2SA1317-S				
		< RESISTOR >				
R11	1-247-881-00	CARBON	120K	5%	1/4W	
R12	1-249-405-11	CARBON	100	5%	1/4W	
R13	1-247-882-11	CARBON	130K	5%	1/4W	
R14	1-249-426-11	CARBON	5.6K	5%	1/4W	
R21	1-247-881-00	CARBON	120K	5%	1/4W	
R22	1-249-405-11	CARBON	100	5%	1/4W	
R23	1-247-882-11	CARBON	130K	5%	1/4W	
R24	1-249-426-11	CARBON	5.6K	5%	1/4W	
R31	1-249-409-11	CARBON	220	5%	1/4W	
R32	1-249-409-11	CARBON	220	5%	1/4W	
R71	1-247-864-11	CARBON	24K	5%	1/4W	
R72	1-249-433-11	CARBON	22K	5%	1/4W	
R73	1-249-437-11	CARBON	47K	5%	1/4W	
R74	1-249-437-11	CARBON	47K	5%	1/4W	
		< VARIABLE RESISTOR >				
RV11	1-238-597-11	RES, ADJ, CARBON 1K				
RV21	1-238-597-11	RES, ADJ, CARBON 1K				
RV71	1-238-600-11	RES, ADJ, CARBON 10K				
RV72	1-238-600-11	RES, ADJ, CARBON 10K				
**********						
*	1-634-843-11	MD-B BOARD (DECK B)				
		**********				
		< CAPACITOR >				
C11	1-110-342-11	MYLAR	390PF	5%	50V	
C12	1-136-157-00	FILM	0.022uF	5%	50V	
C13	1-124-282-00	ELECT	22uF	20%	25V	
C14	1-136-273-91	FILM	75PF	5%	630V	
C15	1-162-288-31	CERAMIC	330PF	10%	50V	
C17	1-162-209-31	CERAMIC	27PF	5%	50V	
C21	1-110-342-11	MYLAR	390PF	5%	50V	
C22	1-136-157-00	FILM	0.022uF	5%	50V	
C23	1-124-282-00	ELECT	22uF	20%	25V	
C24	1-136-273-91	FILM	75PF	5%	630V	
C25	1-162-288-31	CERAMIC	330PF	10%	50V	
C27	1-162-209-31	CERAMIC	27PF	5%	50V	
C31	1-124-443-00	ELECT	100uF	20%	10V	
C32	1-124-443-00	ELECT	100uF	20%	10V	
C33	1-124-119-00	ELECT	330uF	20%	16V	
C51	1-130-729-00	FILM	0.0027uF	5%	100V	
C52	1-130-729-00	FILM	0.0027uF	5%	100V	
C53	1-130-339-00	FILM	0.0056uF	5%	100V	
C54	1-136-562-11	FILM	0.0082uF	5%	630V	
C55	1-161-494-00	CERAMIC	0.022uF		25V	
C56	1-124-925-11	ELECT	2.2uF	20%	100V	
C57	1-124-791-11	ELECT	1.0uF	20%	100V	
C58	1-162-282-31	CERAMIC	100PF	10%	50V	
C71	1-123-875-11	ELECT	10uF	20%	50V	
C72	1-123-875-11	ELECT	10uF	20%	50V	
		< CONNECTOR >				
CNP31	* 1-568-824-11	SOCKET, CONNECTOR 5P				
CNP32	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P				
CNP71	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P				
CNP72	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P				
CNP73	* 1-568-832-11	SOCKET, CONNECTOR 13P				

MD-B **SW-A** **SW-B**

Ref. No.	Part No.	Description				Remark
		< DIODE >				
D31	8-719-107-94	DIODE 1SS202-1				
		< IC >				
IC31	8-759-111-44	IC uPC4570C-1				
		< COIL >				
L11	1-410-780-11	INDUCTOR	27mH			
L21	1-410-780-11	INDUCTOR	27mH			
		< TRANSISTOR >				
Q51	8-729-142-46	TRANSISTOR 2SC2001-LK				
Q52	8-729-142-46	TRANSISTOR 2SC2001-LK				
Q53	8-729-111-29	TRANSISTOR 2SD1616A-K				
Q71	8-729-820-16	TRANSISTOR 2SA1317-S				
		< RESISTOR >				
R11	1-247-881-00	CARBON	120K	5%	1/4W	
R12	1-249-405-11	CARBON	100	5%	1/4W	
R13	1-247-882-11	CARBON	130K	5%	1/4W	
R14	1-249-426-11	CARBON	5.6K	5%	1/4W	
R15	1-249-430-11	CARBON	12K	5%	1/4W	
R21	1-247-881-00	CARBON	120K	5%	1/4W	
R22	1-249-405-11	CARBON	100	5%	1/4W	
R23	1-247-882-11	CARBON	130K	5%	1/4W	
R24	1-249-426-11	CARBON	5.6K	5%	1/4W	
R25	1-249-430-11	CARBON	12K	5%	1/4W	
R31	1-249-409-11	CARBON	220	5%	1/4W	
R32	1-249-409-11	CARBON	220	5%	1/4W	
R51	1-249-435-11	CARBON	33K	5%	1/4W	
R52	1-249-435-11	CARBON	33K	5%	1/4W	
R53	1-249-429-11	CARBON	10K	5%	1/4W	
R54	⚠ 1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R71	1-247-864-11	CARBON	24K	5%	1/4W	
R72	1-249-433-11	CARBON	22K	5%	1/4W	
R73	1-249-437-11	CARBON	47K	5%	1/4W	
R74	1-249-437-11	CARBON	47K	5%	1/4W	
		< VARIABLE RESISTOR >				
RV11	1-238-597-11	RES, ADJ, CARBON 1K				
RV12	1-230-500-11	RES, ADJ, CARBON 220K				
RV21	1-238-597-11	RES, ADJ, CARBON 1K				
RV22	1-230-500-11	RES, ADJ, CARBON 220K				
RV71	1-238-600-11	RES, ADJ, CARBON 10K				
RV72	1-238-600-11	RES, ADJ, CARBON 10K				
		< RELAY >				
RY31	1-515-726-11	RELAY				

Ref. No.	Part No.	Description				Remark
		< TRANSFORMER >				
T51	1-433-337-11	TRANSFORMER, BIAS OSCILLATION				
**********						
*	1-634-841-11	SW-A BOARD				
		**********				
	3-343-419-01	HOLDER (S SENSER A)				
		< CONNECTOR >				
CNP81	* 1-568-852-11	SOCKET, CONNECTOR 9P				
		< IC >				
IC81	8-719-710-03	PHOTO INTERRUPTOR NJL5165K-B				
		< RESISTOR >				
R84	1-249-417-11	CARBON	1K	5%	1/4W	
R85	1-249-408-11	CARBON	180	5%	1/4W	
		< SWITCH >				
S81	1-571-958-11	SWITCH, PUSH (1 KEY) (STOP SWITCH)				
S82	1-571-281-21	SWITCH, LEAF (70EQ)				
S86	1-571-281-21	SWITCH, LEAF (HALF)				
**********						
*	1-634-841-11	SW-B BOARD				
		**********				
	3-343-419-01	HOLDER (S SENSER A)				
		< CONNECTOR >				
CNP81	* 1-568-852-11	SOCKET, CONNECTOR 9P				
		< IC >				
IC81	8-719-710-03	PHOTO INTERRUPTOR NJL5165K-B				
		< RESISTOR >				
R81	1-249-414-11	CARBON	560	5%	1/4W	
R82	1-247-818-11	CARBON	300	5%	1/4W	
R83	1-247-834-11	CARBON	1.3K	5%	1/4W	
R84	1-249-417-11	CARBON	1K	5%	1/4W	
R85	1-249-408-11	CARBON	180	5%	1/4W	

SW-B MISCELLANEOUS

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S81	1-571-958-11	SWITCH, PUSH (1 KEY) (STOP SWITCH)	
S82	1-571-281-21	SWITCH, LEAF (70EQ)	
S83	1-571-281-21	SWITCH, LEAF (METAL)	
S84	1-571-281-21	SWITCH, LEAF (REC A)	
S85	1-571-281-21	SWITCH, LEAF (REC B)	
S86	1-571-281-21	SWITCH, LEAF (HALF)	
**********			
		MISCELLANEOUS	
		*************	
71	* 1-574-727-11	WIRE, FLAT TYPE (9 CORE)	
72	1-575-220-11	WIRE, FLAT TYPE (5 CORE)	
73	1-590-036-11	WIRE, FLAT TYPE (13 CORE)	
74	1-575-217-11	WIRE, FLAT TYPE (15 CORE)	
77	1-575-731-11	WIRE, FLAT TYPE (7 CORE)	
78	1-590-218-11	WIRE, FLAT TYPE (11 CORE)	
HP901	A-2003-418-A	BASE ASSY, HEAD (DECK A)	
HRP901, HE901	A-2003-477-A	BASE ASSY, HEAD (DECK B)	
M901	X-3359-417-1	MOTOR (CAPSTAN) ASSY	
M902	A-2003-474-A	MOTOR (REEL) ASSY	
**********			
		ACCESSORY & PACKING MATERIAL	
	* 3-350-154-01	CUSHION	
	* 3-704-350-01	SHEET (STANDARD), PROTECTION	
**********			
		HARDWARE LIST	
# 1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
# 2	7-682-547-04	SCREW +BVTT 3X6 (S)	
# 3	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
# 4	7-621-773-93	SCREW (PANEL 2.6 TP2)	
# 5	7-627-556-08	SCREW +P 2.6X2.8	
# 6	7-621-775-00	SCREW +B 2.6X3	

Sony Corporation
Audio Group

English
91D1814-1
Printed in Japan
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9-956-204-12

TC-D505

SONY
SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model

SUPPLEMENT-1

File this supplement with the service manual.

Subject: Printed Wiring Board is changed.
(MAIN board)

☛ : addition portion

FORMER TYPE				NEW TYPE					
Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description			Remark
	Not used			C598	1-164-159-11	CERAMIC	0.1uF		50V
	Not used			C599	1-164-159-11	CERAMIC	0.1uF		50V
	Not used			C715	1-162-288-11	CERAMIC	330pF	10%	50V
	Not used			C899	1-164-159-11	CERAMIC	0.1uF		50V
D856	8-719-933-41	DIODE UZL-6H3			Not used				
	Not used			L501	1-408-080-31	INDUCTOR	100uH (Germany)		
	Not used			R109	1-247-831-81	CARBON	1K	5% 1/4W	(Germany)
	Not used			R209	1-247-831-81	CARBON	1K	5% 1/4W	(Germany)
	Not used			R899	1-249-407-11	CARBON	150	5% 1/4W	

9-956-204-81

Sony Corporation
Audio Group

English
93B1875-1
Printed in Japan
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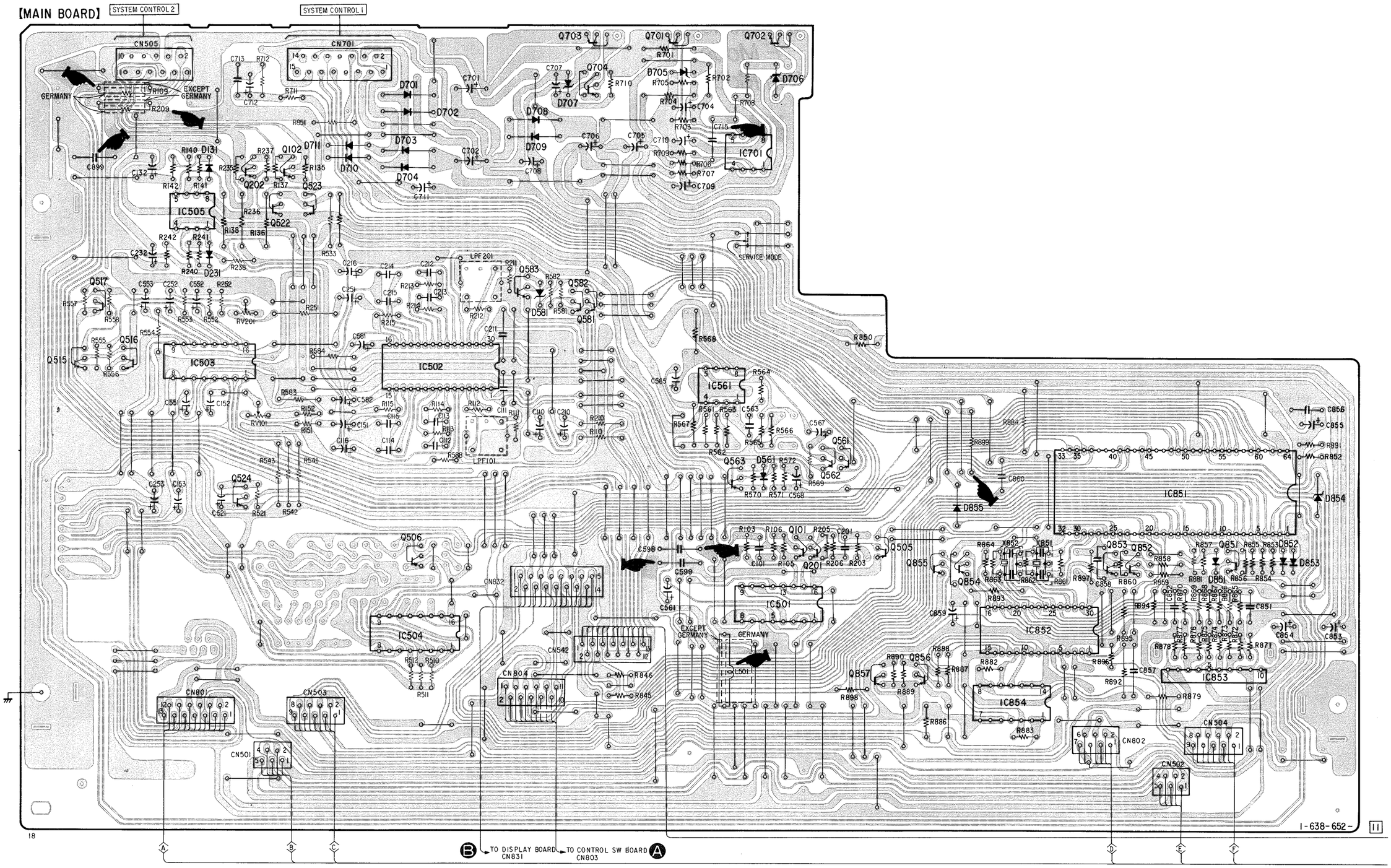
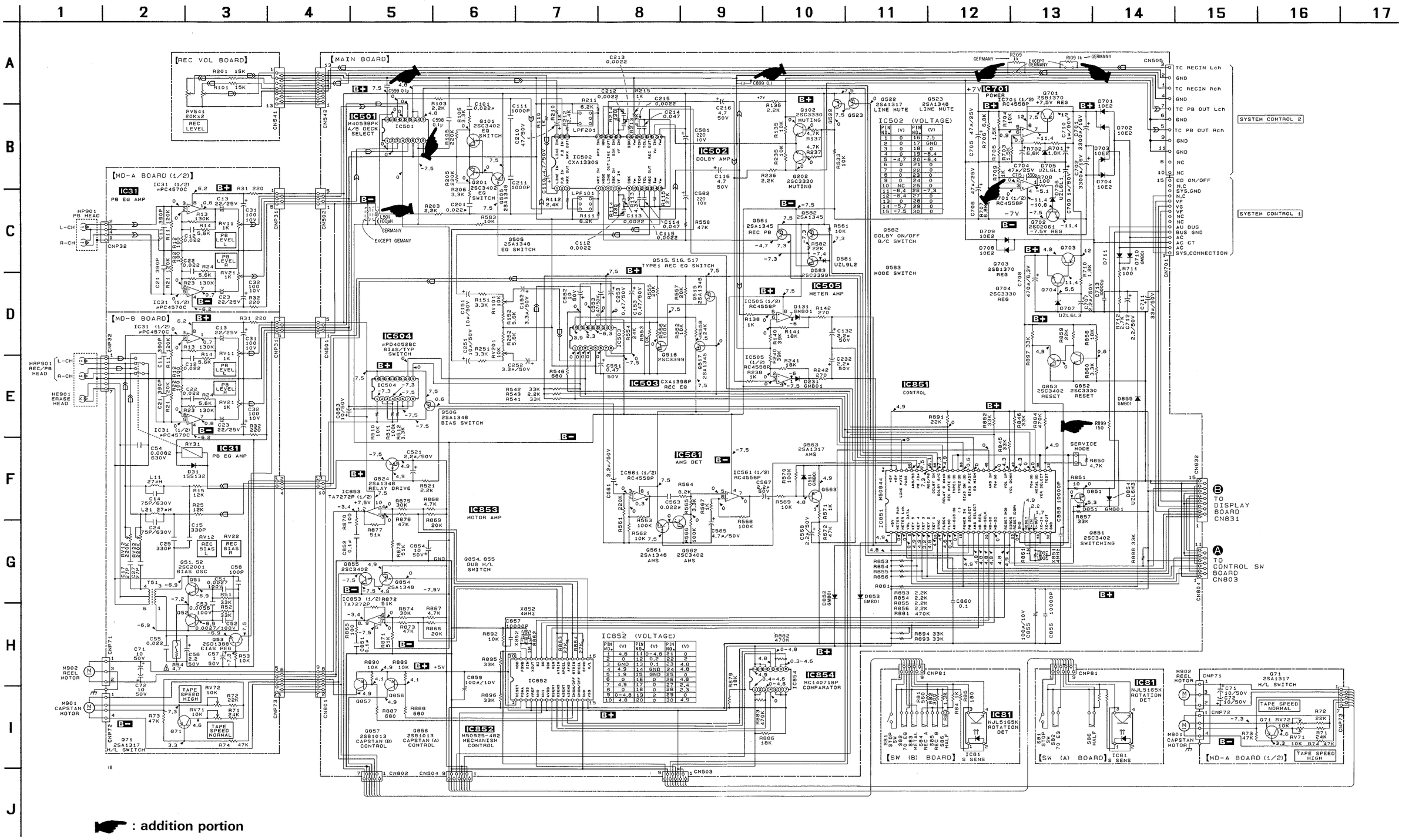
5-1. PRINTED WIRING BOARDS —MAIN Section—

: addition portion

【MAIN BOARD】



5-2. SCHEMATIC DIAGRAMS —MAIN Section—



CDP-M42

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model

Model Name Using Similar Mechanism	CDP-291/391
CD Transport Mechanism Type	CDM14-5BD1
Optical Pick-Up Block Type	BU-5BD1

SPECIFICATIONS

Compact disc player

Frequency response	2 Hz to 20 kHz ±0.5 dB
Signal-to-noise ratio	More than 100 dB
Dynamic range	More than 92 dB
Harmonic distortion	Less than 0.004%
Channel separation	More than 95 dB
Output	LINE OUT (phono jacks) Ouput level 2 V (at 50 kohms) Load impedance over 10 kohms
Power requirements	220-230V AC, 50/60Hz (AEP model) 240V AC, 50/60Hz (UK, AUS model) 110-120, 220-240V AC adjustable, 50/60Hz (E, EA model)
Power consumption	12 W
Weight	Approx. 3.3 kg (6 lbs 10 oz)
Dimensions	Approx. 355 × 95 × 305 mm (w/h/d, including projections) ($14 \times 3\,^3/_4 \times 12\,^1/_8$ inches)
Supplied accessory	Audio connecting cord (1)

Design and specifications subject to change without notice.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

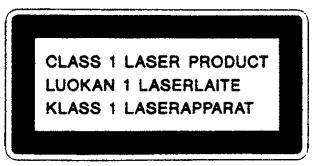
- AUS: Australian model
- EA: Saudi Arabia Model

COMPACT DISC PLAYER

SONY®

1. Laser Diode Properties
   - Material: GaAlAs
   - Wavelength: 780nm
   - Emission Duration: continuous

For the United
Kingdom and European countries



This Compact Disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the rear exterior.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

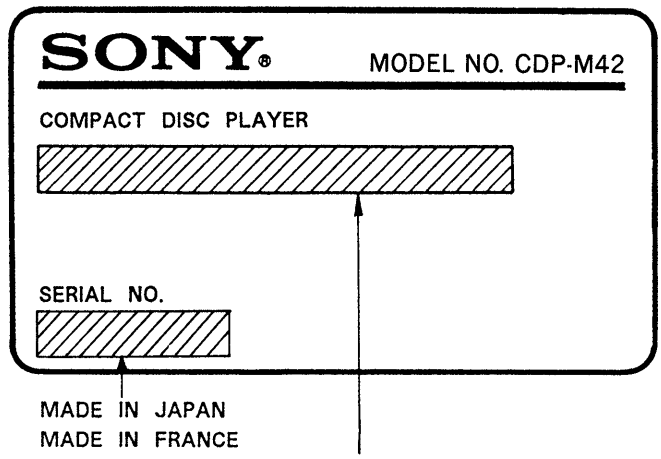
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 25 cm away from the objective lens.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

MODEL IDENTIFICATION

—Specification Labels—



AEP model: AC: 220–230V~50/60Hz
UK AUS model: AC: 240V~50/60Hz
E, EA model: AC: 110–120, 220–240V~ 50/60Hz 12W

AUS: Australian model
EA: Saudi Arabia Model

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs a laser. Therefore, be sure to follow carefully the instructions below when servicing.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

1. Laser Diode Properties
   - Material: GaAlAs
   - Wavelength: 780 nm
   - Emission Duration: continuous
   - Laser Output: max. 44.6 μW*

     * This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.

2. During service, do not take the Optical Pick-up Block apart, and do not adjust the APC circuit. If there is a breakdown in the APC circuit (including laser diode), replace the entire Optiocal Pick-up Block (including APC borad).

BESKYTTELSE AF ØJNE MOD LASERSTRÅLING UNDER SERVICE

I dette apparat anvendes laserlys. Derfor skal nedenstående instruktioner nøje følges under service.

Følg iøvrigt instruktionerne i servicemanualen.

ADVARSEL!!

Under service må øjnene ikke komme nær objektiv-linsen på den optiske pick-up enhed. I tilfælde af at det er nødvendigt at kontrollere udsendelsen af laserlys, skal det ske i en afstand af mere end 25 cm fra den optiske pick-up.

1. Laser-didoe data
   - Materiale: GaAlAs
   - Bølgelængde: 780 nm
   - Udstråling: Kontinuerlig
   - Laseroutput: Max. 0,4 mW*

     * Målt i 1,6 mm afstand fra overfladen af objektivlinsen pa den optiske pick-up enhed.

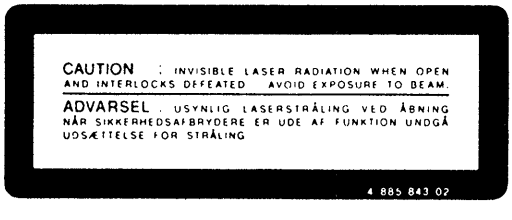
   - Klassifikation: Klasse IIIb.

2. Adskil aldrig den optiske pick-up enhed under service, og juster ikke APC kredsløbet (Automatic Power Control). Hvis APC kredsløbet (incl. laserdioden) bryder ned, skal hele den optiske pick-up enhed (incl. APC printkortet) udskiftes.

LASER ADVARSEL MÆRKNING

Følgende mærkning findes indvendig i apparatet:

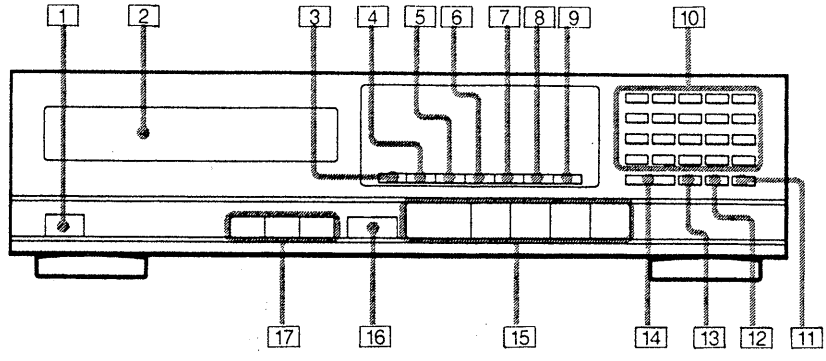
1. Advarsel Mærkning


CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED AVOID EXPOSURE TO BEAM.
ADVARSEL : USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSÆTTELSE FOR STRÅLING
4 885 843 02

VAROITUS: Laite sisältää, laserdiodin, joka lähettää (näkymätöntä) silmille vaarallista lasersateilyä.

SECTION 1
GENERAL

Location of Controls



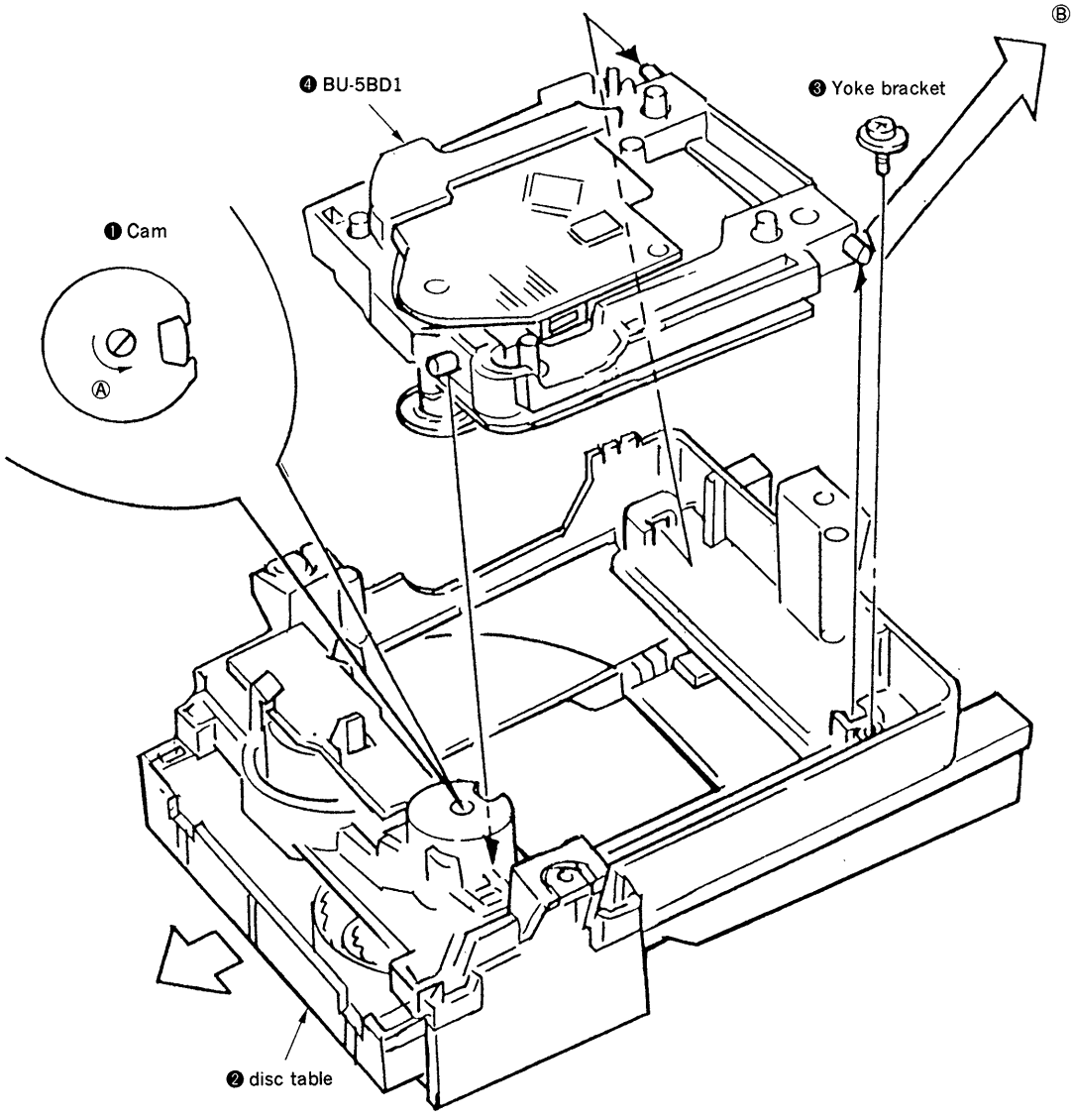
1 POWER switch
2 Display window
3 TIME button
4 AUTO SPACE button
5 REPEAT button
6 PEAK SEARCH button
7 FADER button
8 EDIT/TIME FADE button
9 TIME SET button
10 Numeric buttons
11 > 20 (over 20) button
12 CLEAR button
13 CHECK button
14 MUSIC SCAN button
15 CD operation buttons
⏮ ⏭/◀◀ ▶▶ AMS*/RMS**/manual search, ■ stop,
❚❚ pause, ▶ play
16 ⏏ OPEN/CLOSE button
17 Play mode buttons
CONTINUE, SHUFFLE, PROGRAM

SECTION 2
DISASSEMBLY

BASE UNIT REMOVAL
(BU-5BD1)

Note : Follow the disassembly procedure in the numerical order given.

1. Remove CD mechanism from the set and turn over.
2. Turn the cam ❶ in the Arrow Ⓐ direction by the ⊖ driver.
3. Take out disc table. ❷.
4. Remove yoke bracket ❸.
5. Remove BU-5BD1 ❹ in the Arrow Ⓑ direction.

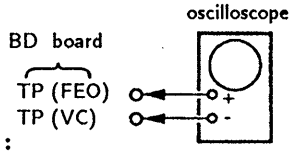


SECTION 3
ELECTRICAL ADJUSTMENT

Note :

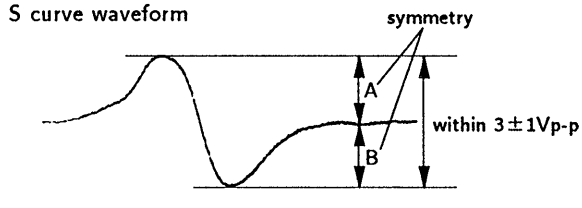
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.
4. Clean an object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FEO) on BD board.
2. Connect between test point TP (FES) and TP (VC) by lead wire.
3. Turned Power switch on and actuate the focus serch. (actuate the focus serch when disc table is moving in and out.)
4. Check the oscilloscope waveform (S curve) is symmetrical between A and B. And confirm peak to peak level within 3±1Vp-p.

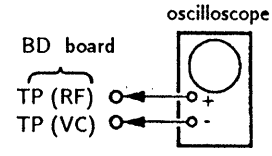


5. After check, remove the lead wire connected in step 2.

Note : • Try to mesure several times to make sure that the ratio of A : B or B : A is more than 10 : 7.

• Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

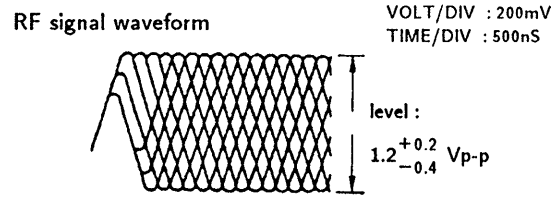


Procedure :

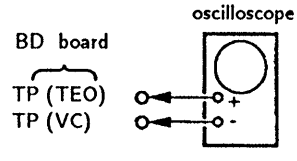
1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turn Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note :

Clear RF signal waveform means that the shape "◇" can be clearly distinguished at the center of the waveform.

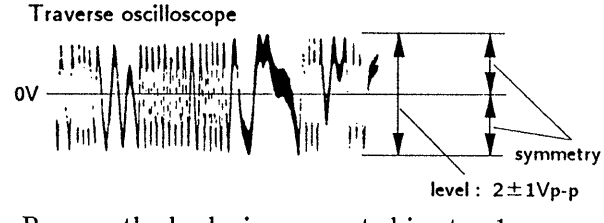


E-F Balance Check



Procedure :

1. Connect test point TP (ADJ) to ground and TP (TES) to TP (VC) with lead wire.
2. Connect oscilloscope to test point TP (TEO) on BD board.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the osilloscope waveform is symmetrical on the top and bottom in relation to 0V, and check this level.

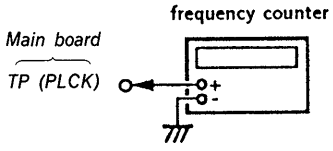


6. Remove the lead wire connected in step 1.

RF PLL Free-run Frequency Check

Procedure :

1. Connect frequency counter to test point (PLCK) with lead wire.

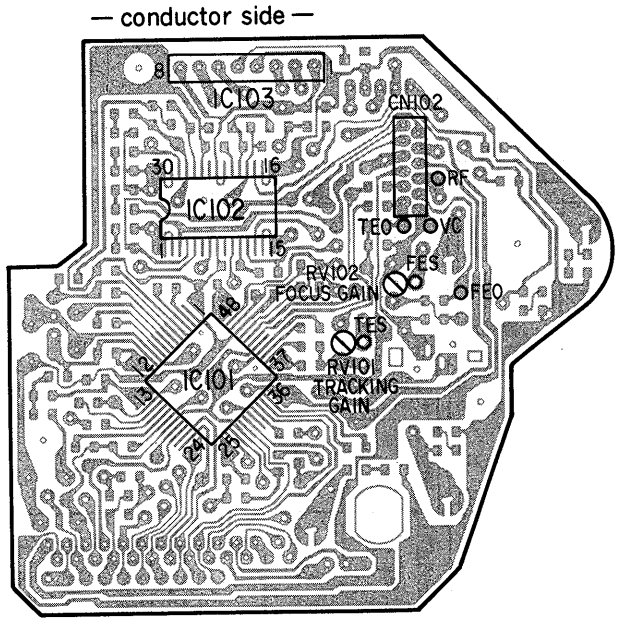


2. Turn Power switch on.
3. Confirm that reading on frequency counter is 4. 3218MHz.

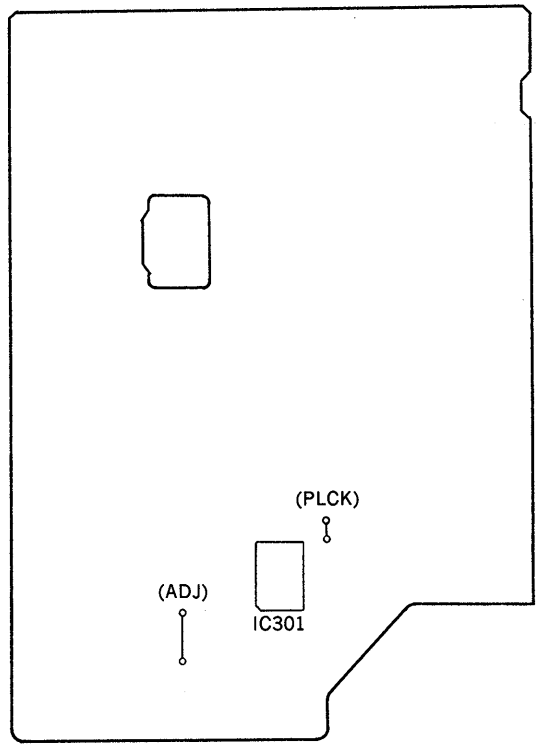
Focus/Tracking Gain

This gain has a margin, so even if it is slightly off. There is no problem.
Therefore, do not perform, this adjustment.
Please note that it should be fixed to mechanical center position when you moved and do not know original position.

Adjustment Locations :
【BD board】



Main board (Componet Side)



SECTION 4
PIN DESCRIPTION

4-1. Description on IC101 (CXA1372Q)

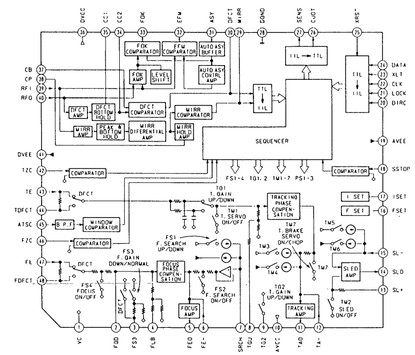
Pin No.	Pin Name	I/O	Pin Description
1	VC		GND when two (±) dual power supplies are in use, or the center voltage (2.5 V) when a single power supply is in use.
2 3	FGD FS3	I I	Time constants for gain switching in normal mode/down mode and for focus gain are connected between the FGD and FS3 pins.
4	FLB	I	The capacitor for low frequency boost in the focus servo loop is connected.
5	FEO	O	Focus drive output
6	FE−	I	Inverted input to focus amplifier
7	SRCH	I	Time constants to generate the focus search waveform are connected.
8 9	TGU TG2	I I	Time constants for gain switching in normal mode/up mode and for tracking gain are connected between TGU pin and TG2 pin.
10	AVCC		Analog power supply (5 V when ± dual power supplies are in use, 5 V when a single power supply is in use.)
11	TAO	O	Tracking drive output
12	TA−	I	Inverted input to tracking amplifier
13	SL+	I	Non-inverted input to sled amplifier
14	SLO	O	Sled drive output
15	SL−	I	Non-inverted input to sled amplifier
16	ESET	I	The 610-k Ω phase compensator resistor is connected to this pin.
17	ISET	I	The current setting resistor is connected to this pin.
18	SSTOP	I	The limit switch is connected to this pin.
19	AVEE		Analog power supply (−5V when ± dual power supplies are in use, or GND when a single power supply is in use.)
20	DIRC	I	Direct control pin.
21	LOCK	I	Sled run-away prevention circuit operates when this signal is "L".
22	CLK	I	Serial data transfer clock input that is supplied from CPU (or DSP).
23	XLT	I	Latch input from CPU (or DSP).
24	DATA	I	Serial data input from CPU (or DSP).
25	XRST	I	System reset. "L" to reset.
26	C.OUT	O	Output to tracking counter.
27	SENS	O	SENS output
28	DGND		Digital ground (GND). (GND when ± dual power supplies are in use. GND when a single power supply is in use.)
29	MIRR	O	Mirror output.
30	DFCT	O	Defect output. "H" when defective.
31	ASY	I	Auto-assymmetry control input.
32	EFM	O	EFM comparator output.

Pin No.	Pin Name	I/O	Pin Description
33	FOK	O	Focus OK.
34	CC2	I	Defect-bottom-hold input (input by capacitive coupling).
35	CC1	O	Defect-bottom-hold output.
36	DVCC		Digital power supply (+5 V when ± dual power supplies in use. +5 V when a single power supply is in use.)
37	CB	I	The defect-bottom-hold capacitor is connected to this pin.
38	CP	I	The mirror hold capacitor is connected to this pin.
39	RF1	I	RF signal input (input by capacitive coupling).
40	RF0	I	RF signal input (input by DC coupling).
41	DVEE		Digital power supply (−5 V when ± dual power supplis are in use. GND when a single power supply is in use.)
42	TZC	I	Tracking zero cross comparator input.
43	TE	I	Tracking error input.
44	TDFCT	I	The defect prevention hold capacitor is connected to this pin.
45	ATSC	I	Anti-shock input.
46	FZC	I	Focus zero-cross comparator input.
47	FE	I	Focus error input.
48	FDFCT	I	The defect prevention hold capacitor is connected to this pin.

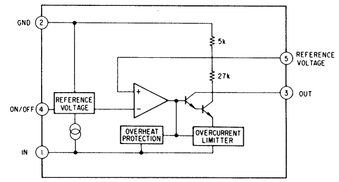
SECTION 5
DIAGRAMS

• IC Block Diagrams

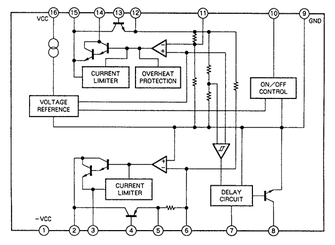
IC101 CXA1372Q



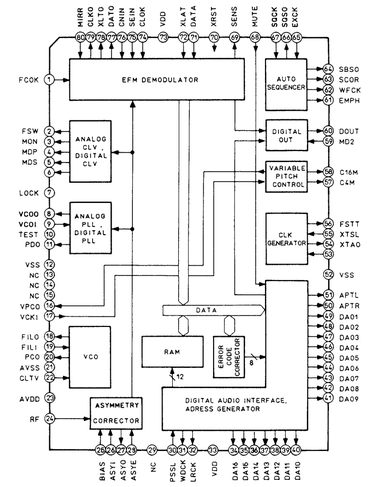
IC201 M5293L



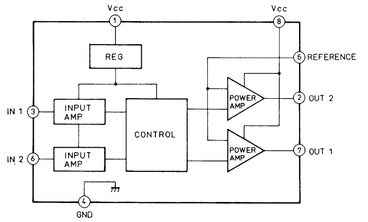
IC202 M5290P



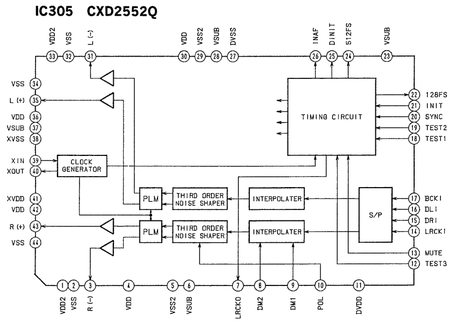
IC301 CXD2500AQ



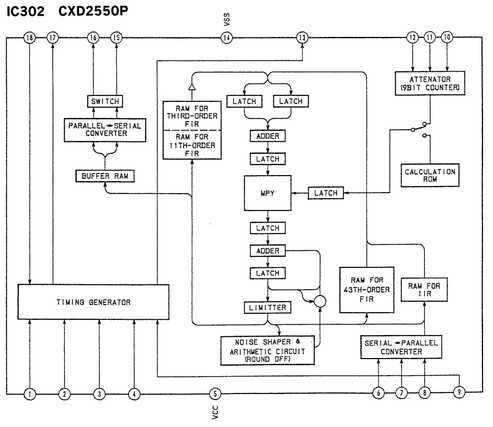
IC103 M54641L

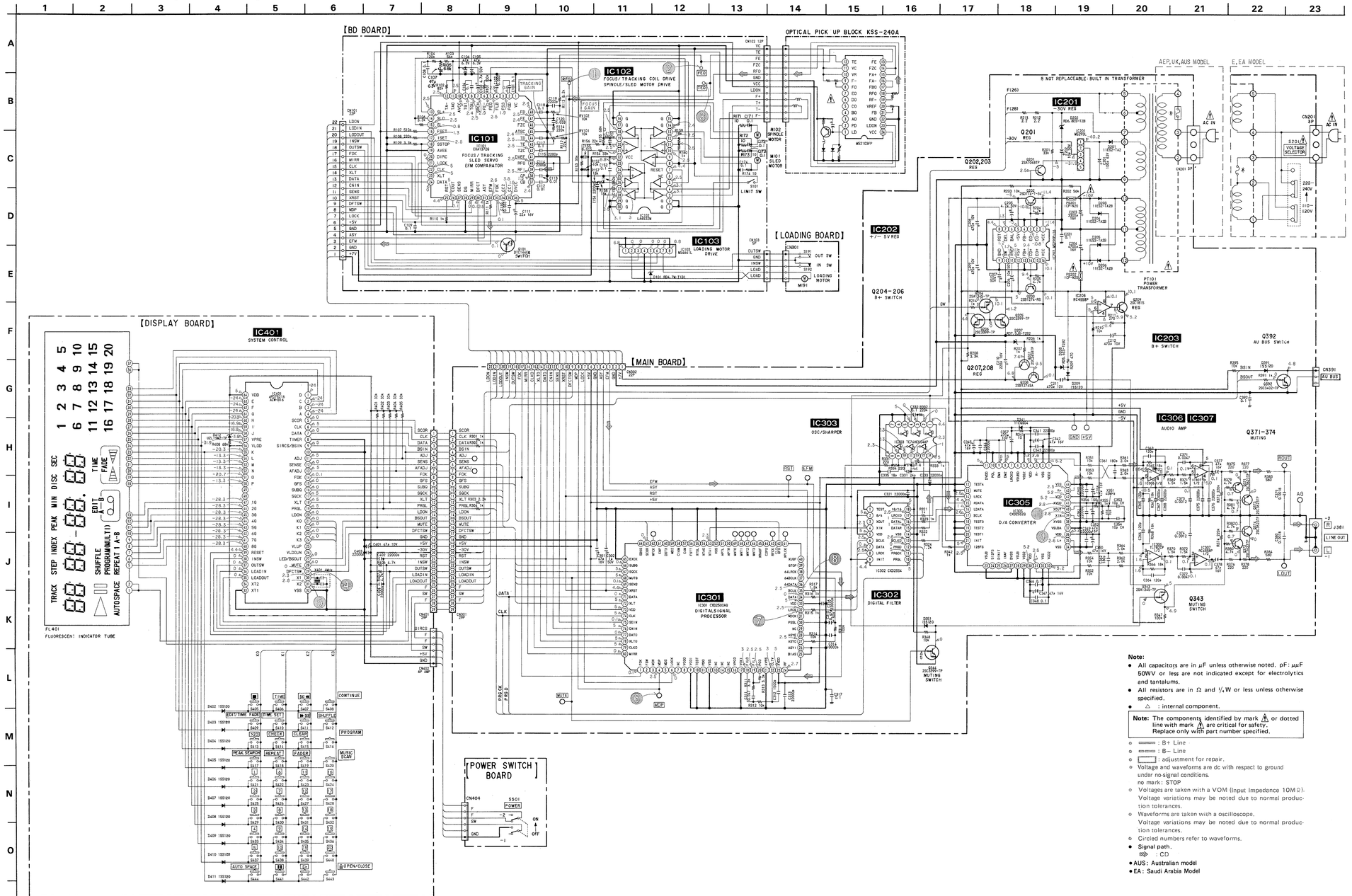


IC305 CXD2552Q



IC302 CXD2550P





● Waveforms

1 TP(RF O) (IC101 (40)) : PLAY mode — 1.3Vp-p
2 TP(FEO) : PLAY mode — APPROX. 500mVp-p — 2.5V
3 TP(TEO) : PLAY mode — APPROX. 100mVp-p — 2.5V
4 IC401 (30) — 4MHz — 8.2Vp-p
5 IC401 (31) — 4MHz — 4.1Vp-p
6 IC301 (4) — 7.6μsec — 2Vp-p
7 IC301 (32) — 23μsec — 4.2Vp-p
8 IC301 (35) — 0.48μsec — 4.2Vp-p
9 IC305 (39) — 45MHz — 0.32Vp-p
10 IC305 (40) — 45MHz — 0.75Vp-p

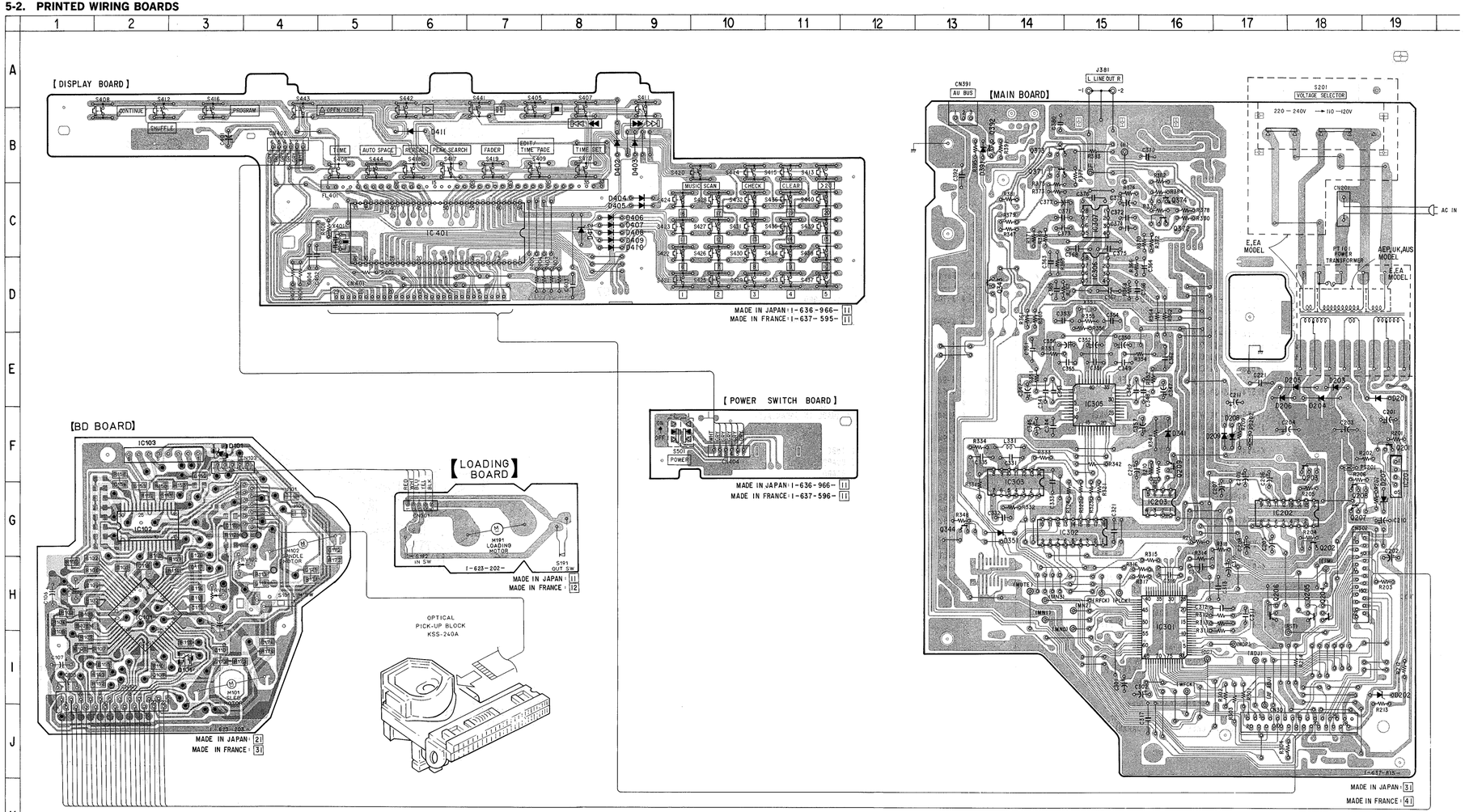
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- ═══ : B+ Line
- ▭▭▭ : B− Line
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions. no mark : STOP
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path. ⇨ : CD
- AUS: Australian model
- EA: Saudi Arabia Model

5-2. PRINTED WIRING BOARDS

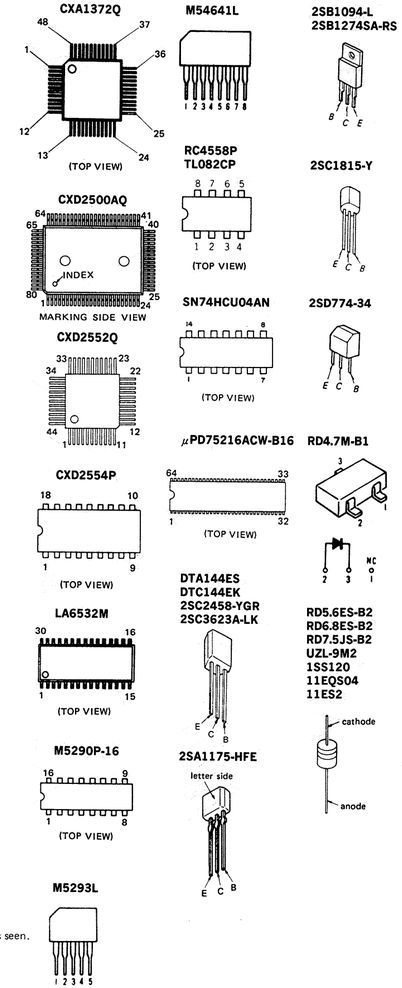


• Semiconductor Location

Ref. No.	Location
D101	F-3
D201	E-19
D202	I-19
D203	E-18
D204	E-18
D205	E-18
D206	F-17
D207	G-19
D208	F-17
D209	F-17
D341	F-16
D351	H-14
D391	B-13
D402	B-9
D403	B-9
D404	C-9
D405	C-9
D406	C-8
D407	C-8
D408	C-8
D409	C-8
D410	C-8
D411	B-6
D412	C-8
IC101	H-2
IC102	G-2
IC103	F-2
IC201	F-19
IC202	G-17
IC203	G-16
IC301	H-16
IC302	G-15
IC303	F-14
IC305	E-15
IC306	D-15
IC307	C-15
IC401	C-6
Q101	I-3
Q201	F-19
Q202	G-18
Q203	F-18
Q204	H-18
Q205	H-18
Q206	H-17
Q207	G-18
Q208	G-18
Q209	F-16
Q343	D-14
Q344	H-13
Q371	B-14
Q372	C-16
Q373	B-14
Q374	C-16
Q392	B-14

Note:
- ○—— : parts extracted from the component side.
- ● : Through hole.
- ▨ : Pattern on the side which is seen.
- ▨ : Pattern of the rear side.
- AUS: Australian model
- EA: Saudi Arabia Model

5-3. SEMICONDUCTOR LEAD LAYOUTS



SECTION 6
EXPLODED VIEWS

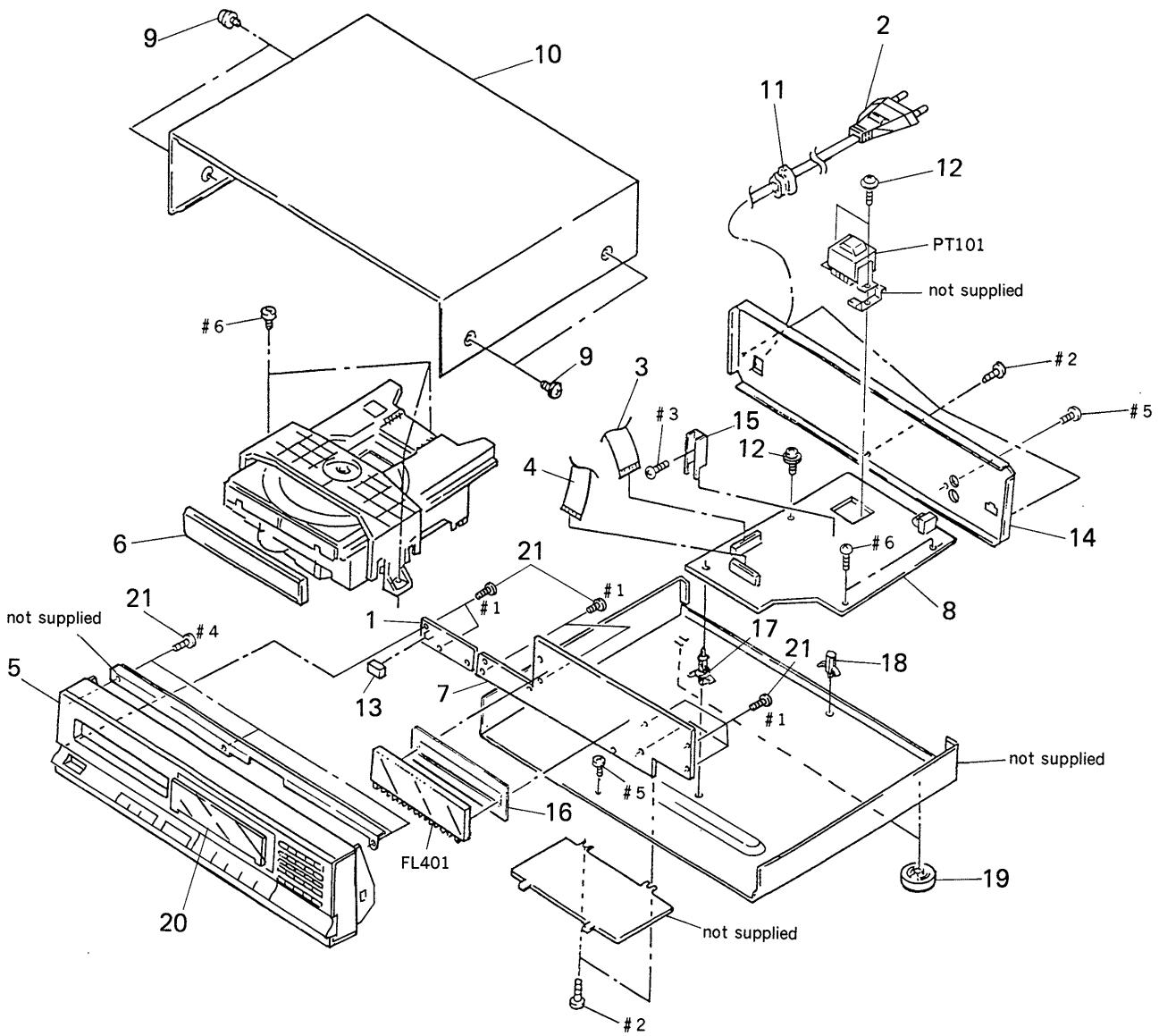
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE)...(RED)
  ↑ Parts Color ↑ Cabinet's Color
- Hardware(# mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

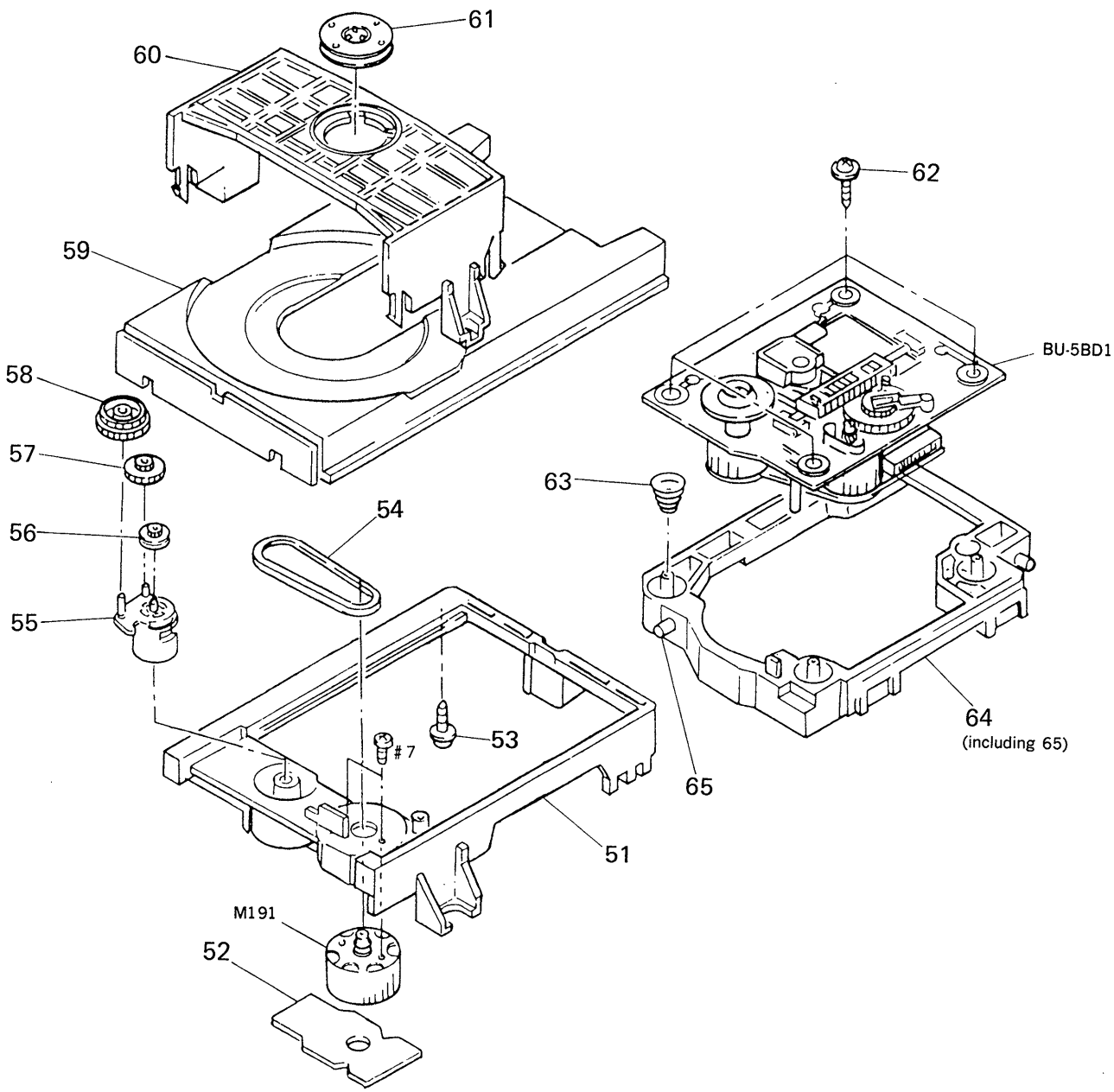
- AUS: Australian model
- EA: Saudi Arabia Model

6-1. CABINET BLOCK



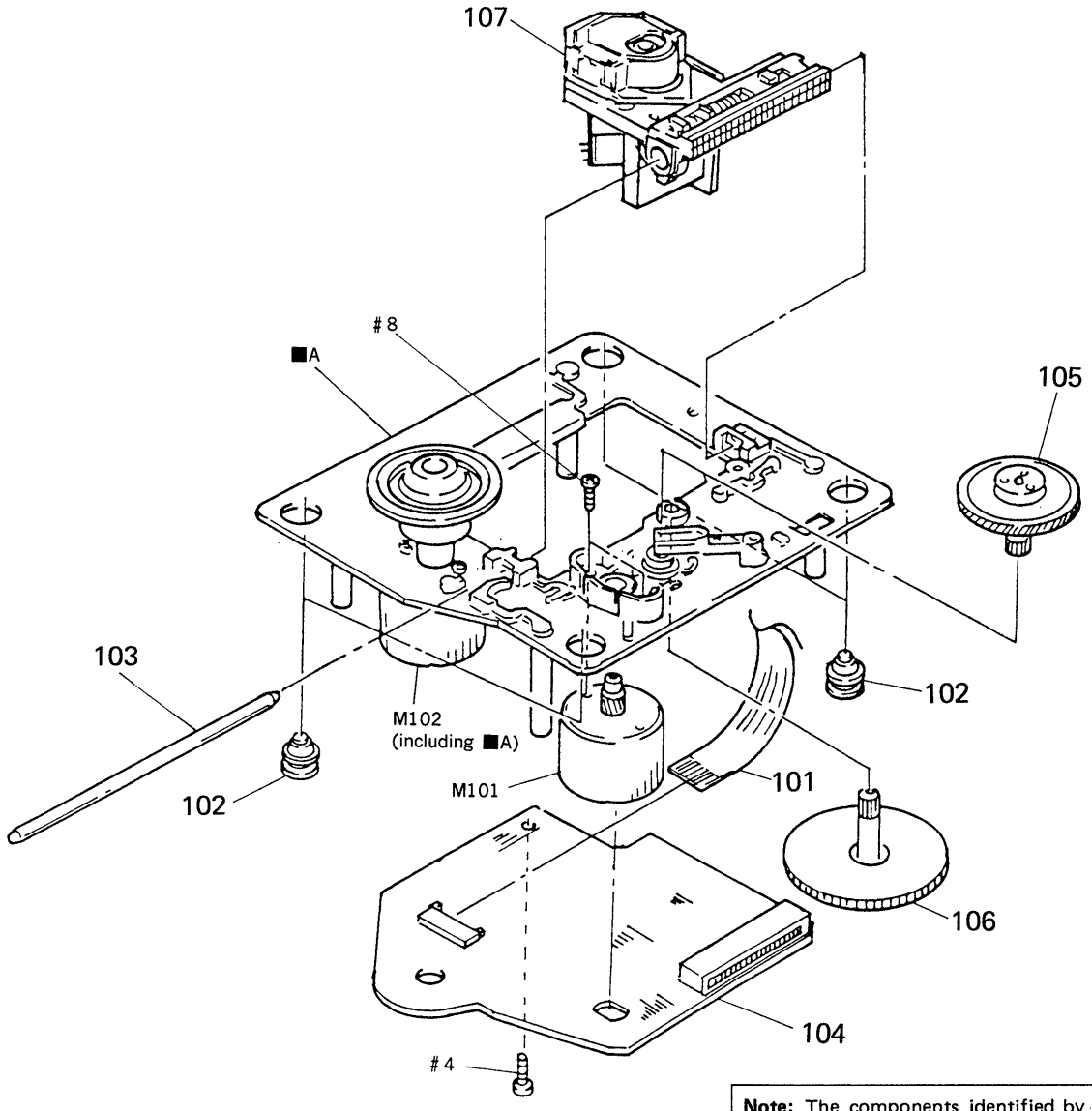
Ref. No.	Part No.	Description	Remark
1	* 1-636-967-11	POWER SW BOARD (MADE IN JAPAN)	
1	* 1-637-596-11	POWER SW BOARD (MADE IN FRANCE)	
2	⚠· 1-575-653-21	CORD, POWER (E)	
2	⚠· 1-574-127-31	CORD, POWER (MADE IN FRANCE:AEP)	
2	⚠· 1-590-379-11	CORD, POWER (UK)	
2	⚠· 1-575-651-21	CORD, POWER (MADE IN JAPAN:AEP, EA)	
2	⚠· 1-574-358-31	CORD, POWER (AUS)	
3	1-575-160-11	WIRE, FLAT TYPE (22 CORE)	
4	1-535-871-11	JUMPER, FILM (WITH TERMINAL)	
5	X-4941-368-2	PANEL ASSY, FRONT (MADE IN FRANCE:AEP:BLACK)	
5	X-4941-369-2	PANEL ASSY, FRONT (MADE IN FRANCE:AEP:GRAY, UK)	
5	X-4941-465-1	PANEL ASSY, FRONT (MADE IN JAPAN:AEP, AUS)	
5	X-4941-466-1	PANEL ASSY, FRONT (E, EA)	
6	4-941-980-01	PANEL, LOADING (E, EA) (MADE IN FRANCE:AEP:BLACK)	
6	4-941-980-21	PANEL, LOADING (MADE IN JAPAN:AEP, AUS) (MADE IN FRANCE:AEP, GRAY, UK)	
7	* 1-636-966-11	DISPLAY BOARD (MADE IN JAPAN)	
7	* A-4617-673-A	DISPLAY BOARD, COMPLETE (MADE IN FRANCE)	
8	* A-4617-671-A	MAIN BOARD, COMPLETE (MADE IN FRANCE)	
8	* A-4617-740-A	MAIN BOARD, COMPLETE (MADE IN JAPAN:AEP, AUS)	
8	* A-4617-852-A	MAIN BOARD, COMPLETE (E, EA)	
9	3-704-366-01	SCREW (CASE) (M3X8)	
10	4-919-376-31	CASE (MADE IN FRANCE)	
10	* 4-939-802-71	CASE (MADE IN JAPAN)	
11	* 3-703-244-00	BUSHING (2104), CORD (AEP, UK, EA, AUS)	
11	* 3-703-571-11	BUSHING (S) (4516), CORD (E)	
12	4-886-821-11	SCREW, S TIGHT, +PTTWH 3X6	
13	4-941-982-01	BUTTON (POWER)	
14	* 4-941-467-11	PANEL (ALSACE), BACK (MADE IN FRANCE)	
14	* 4-941-552-71	PANEL, BACK (E, EA)	
14	* 4-941-552-81	PANEL, BACK (AUS)	
14	* 4-941-552-61	PANEL, BACK (MADE IN JAPAN:AEP)	
15	* 4-941-237-01	HEAT SINK	
16	4-941-981-01	HOLDER, FL TUBE	
17	* 4-924-098-31	HOLDER, PC BOARD	
18	* 3-349-025-41	HOLDER, PC BOARD	
19	* 4-931-169-01	FOOT	
20	4-942-330-02	WINDOW (METER) (MADE IN FRANCE)	
21	4-928-635-01	SCREW, +BV (2.6X8) TAPPING (MADE IN FRANCE)	
FL401	1-519-618-11	INDICATOR TUBE, FLUORESCENT	
PT101 ⚠·	1-449-923-11	TRANSFORMER, POWER (E, EA)	
PT101 ⚠·	1-449-925-11	TRANSFORMER, POWER (MADE IN FRANCE)	
PT101 ⚠·	1-449-922-11	TRANSFORMER, POWER (MADE IN JAPAN:AEP, AUS)	

6-2. CD MECHANISM BLOCK (CDM14-5BD1)



Ref. No.	Part No.	Description	Remark
51	4-933-111-01	CHASSIS (MD)	
52	* 1-632-202-11	LOADING BOARD	
53	* 4-917-583-21	BRACKET, YOKE	
54	4-927-649-01	BELT	
55	4-933-109-01	CAM	
56	4-927-651-01	PULLEY (S)	
57	4-927-628-01	GEAR (C)	
58	4-933-107-01	GEAR (PL)	
59	4-933-112-01	TABLE, DISK	
60	4-933-110-01	HOLDER (MG)	
61	* 1-452-538-11	MAGNET	
62	4-933-134-01	SCREW (+PTPWH M2.6X6)	
63	4-917-541-01	SPRING (B)	
64	4-933-129-01	HOLDER (BU)	
65	4-933-108-01	SHAFT (CAM)	
M191	A-4604-363-A	MOTOR (L) ASSY	

6-3. OPTICAL PICK-UP BLOCK (BU-5BD1)



Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.		Part No.	Description	Remark
101		1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
102		4-933-126-01	INSULATOR (A)	
103		4-917-565-01	SHAFT, SLED	
104	*	A-4617-161-A	BD BOARD, COMPLETE	
105		4-917-567-01	GEAR (M)	
106		4-917-564-01	GEAR (P), FLATNESS	
107	⚠	8-848-144-11	DEVICE, OPTICAL KSS-240A	
M101		X-4917-523-3	MOTOR ASSY (SLED)	
M102		X-4917-504-1	MOTOR ASSY (SPINDLE) (MADE IN JAPAN)	

BD

SECTION 7
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- CAPACITORS
  uF: μF
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: μH
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA..., uPA...: μPA..., uPB...: μPB..., uPC...: μPC..., uPD...: μPD....

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- AUS: Australian model
- EA: Saudi Arabia Model

Ref. No.	Part No.	Description			Remark
*	A-4617-161-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C102	1-163-989-11	CERAMIC CHIP	0.033uF	10% 25V	
C103	1-126-163-11	ELECT	4.7uF	20% 50V	
C104	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C105	1-126-154-11	ELECT	47uF	20% 6.3V	
C106	1-126-154-11	ELECT	47uF	20% 6.3V	
C107	1-126-154-11	ELECT	47uF	20% 6.3V	
C108	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C109	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C110	1-163-989-11	CERAMIC CHIP	0.033uF	10% 25V	
C111	1-131-367-00	TANTALUM	22uF	10% 20V	
C112	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C113	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C114	1-164-161-11	CERAMIC CHIP	0.0022uF	10% 100V	
C115	1-164-161-11	CERAMIC CHIP	0.0022uF	10% 100V	
C117	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C118	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C119	1-164-161-11	CERAMIC CHIP	0.0022uF	10% 100V	
C120	1-163-989-11	CERAMIC CHIP	0.033uF	10% 25V	
C151	1-163-019-00	CERAMIC CHIP	0.0068uF	10% 50V	
C152	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C153	1-163-006-11	CERAMIC CHIP	560PF	10% 50V	
C154	1-164-161-11	CERAMIC CHIP	0.0022uF	10% 100V	
C155	1-163-023-00	CERAMIC CHIP	0.015uF	5% 50V	
C171	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C172	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C173	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C174	1-163-038-00	CERAMIC CHIP	0.1uF	25V	

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN101	1-568-796-11	SOCKET, CONNECTOR 22P			
CN102	1-568-795-11	SOCKET, CONNECTOR 12P			
CN103 *	1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P			
		< DIODE >			
D101	8-719-105-72	DIODE RD4.7M-B1			
		< IC >			
IC101	8-752-050-82	IC CXA1372Q			
IC102	8-759-821-94	IC LA6532M			
IC103	8-759-633-65	IC M54641L			
		< JACK >			
J101	1-216-295-00	METAL CHIP	0	5% 1/10W	
J102	1-216-295-00	METAL CHIP	0	5% 1/10W	
		< TRANSISTOR >			
Q101	8-729-901-01	TRANSISTOR DTC144EK			
		< RESISTOR >			
R101	1-216-097-00	METAL CHIP	100K	5% 1/10W	
R102	1-216-095-00	METAL CHIP	82K	5% 1/10W	
R103	1-216-091-00	METAL CHIP	56K	5% 1/10W	
R104	1-216-099-00	METAL CHIP	120K	5% 1/10W	
R105	1-216-069-00	METAL CHIP	6.8K	5% 1/10W	
R106	1-216-061-00	METAL CHIP	3.3K	5% 1/10W	
R107	1-216-114-00	METAL GLAZE	510K	5% 1/10W	
R108	1-216-105-00	METAL CHIP	220K	5% 1/10W	
R109	1-216-061-00	METAL CHIP	3.3K	5% 1/10W	
R110	1-216-049-00	METAL CHIP	1K	5% 1/10W	

BD **DISPLAY**

Ref. No.	Part No.	Description			Remark
R111	1-216-049-00	METAL CHIP	1K	5% 1/10W	
R112	1-216-083-00	METAL CHIP	27K	5% 1/10W	
R113	1-216-071-00	METAL CHIP	8.2K	5% 1/10W	
R114	1-216-105-00	METAL CHIP	220K	5% 1/10W	
R152	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R153	1-216-085-00	METAL CHIP	33K	5% 1/10W	
R154	1-216-085-00	METAL CHIP	33K	5% 1/10W	
R155	1-216-093-00	METAL CHIP	68K	5% 1/10W	
R156	1-216-081-00	METAL CHIP	22K	5% 1/10W	
R157	1-216-079-00	METAL CHIP	18K	5% 1/10W	
R158	1-216-079-00	METAL CHIP	18K	5% 1/10W	
R159	1-216-079-00	METAL CHIP	18K	5% 1/10W	
R160	1-216-049-00	METAL CHIP	1K	5% 1/10W	
R171	1-216-001-00	METAL CHIP	10	5% 1/10W	
R172	1-216-001-00	METAL CHIP	10	5% 1/10W	
R173	1-216-001-00	METAL CHIP	10	5% 1/10W	
R174	1-216-001-00	METAL CHIP	10	5% 1/10W	
		< VARIABLE RESISTOR >			
RV101	1-238-016-11	RES, ADJ, CARBON 10K			
RV102	1-238-016-11	RES, ADJ, CARBON 10K			
		< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT)			
**********					
*	A-4617-673-A	DISPLAY BOARD, COMPLETE (MADE IN FRANCE)			
*	1-636-966-11	DISPLAY BOARD (MADE IN JAPAN)			
		**********			
	1-535-871-11	JUMPER, FILM (WITH TERMINAL)			
	4-941-981-01	HOLDER, FL TUBE			
		< CAPACITOR >			
C401	1-126-022-11	ELECT	47uF	20% 10V	
C402	1-161-494-00	CERAMIC	0.022uF	25V	
C403	1-161-494-00	CERAMIC	0.022uF	25V	
C404	1-161-494-00	CERAMIC	0.022uF	25V	
		< DIODE >			
D402	8-719-912-20	DIODE 1SS120			
D403	8-719-912-20	DIODE 1SS120			
D404	8-719-912-20	DIODE 1SS120			
D405	8-719-912-20	DIODE 1SS120			
D406	8-719-912-20	DIODE 1SS120			
D407	8-719-912-20	DIODE 1SS120			
D408	8-719-912-20	DIODE 1SS120			
D409	8-719-912-20	DIODE 1SS120			
D410	8-719-912-20	DIODE 1SS120			
D411	8-719-912-20	DIODE 1SS120			
D412	8-719-001-15	DIODE UZL-9M2			
		< FILTER >			
FL401	1-519-618-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC401	8-759-151-90	IC uPD75216ACW-B16			
		< RESISTOR >			
R401	1-249-435-11	CARBON	33K	5% 1/4W	
R402	1-249-435-11	CARBON	33K	5% 1/4W	
R403	1-249-435-11	CARBON	33K	5% 1/4W	
R404	1-249-435-11	CARBON	33K	5% 1/4W	
R405	1-249-435-11	CARBON	33K	5% 1/4W	
R406	1-249-425-11	CARBON	4.7K	5% 1/4W	
R407	1-249-425-11	CARBON	4.7K	5% 1/4W	
R408	1-249-439-11	CARBON	68K	5% 1/4W	
		< SWITCH >			
S405	1-554-303-21	SWITCH, TACTILE (■)			
S406	1-554-303-21	SWITCH, TACTILE (TIME)			
S407	1-554-303-21	SWITCH, TACTILE (⏮ ◀◀)			
S408	1-554-303-21	SWITCH, TACTILE (CONTINUE)			
S409	1-554-303-21	SWITCH, TACTILE (EDIT/TIMEFADE)			
S410	1-554-303-21	SWITCH, TACTILE (TIME SET)			
S411	1-554-303-21	SWITCH, TACTILE (▶▶ ⏭)			
S412	1-554-303-21	SWITCH, TACTILE (SHUFFLE)			
S413	1-554-303-21	SWITCH, TACTILE (>20)			
S414	1-554-303-21	SWITCH, TACTILE (CHECK)			
S415	1-554-303-21	SWITCH, TACTILE (CLEAR)			
S416	1-554-303-21	SWITCH, TACTILE (PROGRAM)			
S417	1-554-303-21	SWITCH, TACTILE (PEAK SEARCH)			
S418	1-554-303-21	SWITCH, TACTILE (REPEAT)			
S419	1-554-303-21	SWITCH, TACTILE (FADER)			
S420	1-554-303-21	SWITCH, TACTILE (MUSIC SCAN)			
S421	1-554-303-21	SWITCH, TACTILE (1)			
S422	1-554-303-21	SWITCH, TACTILE (6)			
S423	1-554-303-21	SWITCH, TACTILE (11)			
S424	1-554-303-21	SWITCH, TACTILE (16)			
S425	1-554-303-21	SWITCH, TACTILE (2)			
S426	1-554-303-21	SWITCH, TACTILE (7)			
S427	1-554-303-21	SWITCH, TACTILE (12)			
S428	1-554-303-21	SWITCH, TACTILE (17)			
S429	1-554-303-21	SWITCH, TACTILE (3)			

DISPLAY | LOADING | MAIN

Ref. No.	Part No.	Description	Remark
S430	1-554-303-21	SWITCH, TACTILE (8)	
S431	1-554-303-21	SWITCH, TACTILE (13)	
S432	1-554-303-21	SWITCH, TACTILE (18)	
S433	1-554-303-21	SWITCH, TACTILE (4)	
S434	1-554-303-21	SWITCH, TACTILE (9)	
S435	1-554-303-21	SWITCH, TACTILE (14)	
S436	1-554-303-21	SWITCH, TACTILE (19)	
S437	1-554-303-21	SWITCH, TACTILE (5)	
S438	1-554-303-21	SWITCH, TACTILE (10)	
S439	1-554-303-21	SWITCH, TACTILE (15)	
S440	1-554-303-21	SWITCH, TACTILE (20)	
S441	1-554-303-21	SWITCH, TACTILE (■)	
S442	1-554-303-21	SWITCH, TACTILE (▷)	
S443	1-554-303-21	SWITCH, TACTILE (OPEN/CLOSE)	
S444	1-554-303-21	SWITCH, TACTILE (AUTO SPACE)	
		< CERAMIC >	
X401	1-577-082-11	VIBRATOR, CERAMIC (4MHz)	
**********			
*	1-632-202-11	LOADING BOARD	
		**********	
		< CONNECTOR >	
CN301 *	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P	
		< SWITCH >	
S191	1-572-086-11	SWITCH, LEAF (LOAD OUT)	
S192	1-572-086-11	SWITCH, LEAF (LOAD IN)	
**********			
*	A-4617-671-A	MAIN BOARD, COMPLETE (MADE IN FRANCE)	
*	A-4617-740-A	MAIN BOARD, COMPLETE (MADE IN JAPAN:AEP, AUS)	
*	A-4617-825-A	MAIN BOARD, COMPLETE (E, EA)	
		**********	
*	4-941-237-01	HEAT SINK	
	7-682-547-09	SCREW +B 3X6	
		< CAPACITOR >	

Ref. No.	Part No.	Description				Remark
C201	1-124-572-11	ELECT	100uF	20%	63V	
C202	1-126-059-11	ELECT	10uF	20%	50V	
C203	1-124-887-00	ELECT	3300uF	20%	16V	
C204	1-126-937-11	ELECT	4700uF	20%	16V	
C205	1-126-163-11	ELECT	4.7uF	20%	50V	
C206	1-126-059-11	ELECT	10uF	20%	50V	
C207	1-126-059-11	ELECT	10uF	20%	50V	
C208	1-124-997-11	ELECT	470uF	20%	10V	
C209	1-124-997-11	ELECT	470uF	20%	10V	
C210	1-126-024-11	ELECT	220uF	20%	16V	
C211	1-124-997-11	ELECT	470uF	20%	10V	
C212	1-124-997-11	ELECT	470uF	20%	10V	
C221	1-164-159-11	CERAMIC	0.1uF		50V	
C301	1-126-022-11	ELECT	47uF	20%	16V	
C302	1-126-301-11	ELECT	1uF	20%	50V	
C311	1-130-491-00	MYLAR	0.047uF	5%	50V	
C312	1-161-374-11	CERAMIC	0.0015uF	20%	50V	
C313	1-161-494-00	CERAMIC	0.022uF		25V	
C314	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C315	1-126-300-11	ELECT	0.47uF	20%	50V	
C316	1-161-494-00	CERAMIC	0.022uF		25V	
C317	1-164-159-11	CERAMIC	0.1uF		50V	
C321	1-161-494-00	CERAMIC	0.022uF		25V	
C331	1-162-208-31	CERAMIC	24PF	5%	50V	
C332	1-130-495-00	MYLAR	0.1uF	5%	50V	
C333	1-161-494-00	CERAMIC	0.022uF		25V	
C335	1-162-205-31	CERAMIC	18PF	5%	50V	
C341	1-161-494-00	CERAMIC	0.022uF		25V	
C342	1-126-022-11	ELECT	47uF	20%	16V	
C343	1-161-494-00	CERAMIC	0.022uF		25V	
C344	1-161-494-00	CERAMIC	0.022uF		25V	
C345	1-126-022-11	ELECT	47uF	20%	16V	
C346	1-164-159-11	CERAMIC	0.1uF		50V	
C347	1-126-022-11	ELECT	47uF	20%	16V	
C348	1-164-159-11	CERAMIC	0.1uF		50V	
C349	1-161-494-00	CERAMIC	0.022uF		25V	
C350	1-126-022-11	ELECT	47uF	20%	16V	
C351	1-161-494-00	CERAMIC	0.022uF		25V	
C352	1-126-022-11	ELECT	47uF	20%	16V	
C353	1-162-199-31	CERAMIC	10PF	5%	50V	
C354	1-162-199-31	CERAMIC	10PF	5%	50V	
C355	1-161-494-00	CERAMIC	0.022uF		25V	
C356	1-126-022-11	ELECT	47uF	20%	16V	
C357	1-124-997-11	ELECT	470uF	20%	10V	
C361	1-162-285-31	CERAMIC	180PF	10%	50V	
C362	1-162-285-31	CERAMIC	180PF	10%	50V	
C363	1-162-283-31	CERAMIC	120PF	10%	50V	
C364	1-162-283-31	CERAMIC	120PF	10%	50V	
C365	1-162-283-31	CERAMIC	120PF	10%	50V	
C366	1-162-283-31	CERAMIC	120PF	10%	50V	
C367	1-161-494-00	CERAMIC	0.022uF		25V	
C368	1-161-494-00	CERAMIC	0.022uF		25V	
C371	1-130-479-00	MYLAR	0.0047uF	5%	50V	
C372	1-130-479-00	MYLAR	0.0047uF	5%	50V	
C373	1-130-472-00	MYLAR	0.0012uF	5%	50V	
C374	1-130-472-00	MYLAR	0.0012uF	5%	50V	
C375	1-161-494-00	CERAMIC	0.022uF		25V	

Ref. No.	Part No.	Description			Remark
C376	1-161-494-00	CERAMIC	0.022uF		25V
C377	1-126-022-11	ELECT	47uF	20%	16V
C378	1-126-022-11	ELECT	47uF	20%	16V
C379	1-130-474-00	MYLAR	0.0018uF	5%	50V
C380	1-130-474-00	MYLAR	0.0018uF	5%	50V
C392	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
CN201	* 1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P (AU BUS)			
CN301	* 1-568-844-11	SOCKET, CONNECTOR 29P			
CN302	* 1-568-822-11	SOCKET, CONNECTOR 22P			
CN391	* 1-565-561-11	PIN, CONNECTOR 3P			
		< DIODE >			
D201	8-719-200-82	DIODE 11ES2			
D202	8-719-109-97	DIODE RD6.8ES-B2			
D203	8-719-200-82	DIODE 11ES2			
D204	8-719-200-82	DIODE 11ES2			
D205	8-719-200-82	DIODE 11ES2			
D206	8-719-200-82	DIODE 11ES2			
D207	8-719-114-49	DIODE RD7.5JS-B2			
D208	8-719-109-89	DIODE RD5.6ES-B2			
D209	8-719-912-20	DIODE 1SS120			
D341	8-719-210-21	DIODE 11EQS04			
D351	8-719-912-20	DIODE 1SS120			
D391	8-719-912-20	DIODE 1SS120			
		< IC >			
IC201	8-759-633-42	IC M5293L			
IC202	8-759-630-21	IC M5290P-16			
IC203	8-759-945-58	IC RC4558P			
IC301	8-752-337-26	IC CXD2500AQ			
IC302	8-752-337-09	IC CXD2554P			
IC303	8-759-917-18	IC SN74HCU04AN			
IC305	8-752-334-87	IC CXD2552Q			
IC306	8-759-990-82	IC TL082CP			
IC307	8-759-945-58	IC RC4558P			
		< JACK >			
J381	1-569-442-11	JACK, PIN 2P (LINE OUT)			
		< COIL >			
L331	1-408-403-00	INDUCTOR	3.3uH		
PS201 ⚠	1-532-685-00	LINK, IC	0.8A		
PS202 ⚠	1-532-637-00	LINK, IC	1.0A		

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q201	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q202	8-729-140-96	TRANSISTOR 2SD774-34			
Q203	8-729-111-67	TRANSISTOR 2SB1094-L			
Q204	8-729-900-65	TRANSISTOR DTA144ES			
Q205	8-729-900-89	TRANSISTOR DTC144ES			
Q206	8-729-900-89	TRANSISTOR DTC144ES			
Q207	8-729-230-45	TRANSISTOR 2SC2458-YGR			
Q208	8-729-821-73	TRANSISTOR 2SB1274SA-RS			
Q209	8-729-281-52	TRANSISTOR 2SC1815-Y			
Q343	8-729-900-65	TRANSISTOR DTA144ES			
Q344	8-729-900-89	TRANSISTOR DTC144ES			
Q371	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q372	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q373	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q374	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q392	8-729-900-80	TRANSISTOR DTC114ES			
		< RESISTOR >			
R201	1-249-435-11	CARBON	33K	5%	1/4W
R202	1-249-438-11	CARBON	56K	5%	1/4W
R203	1-249-429-11	CARBON	10K	5%	1/4W
R204	1-249-425-11	CARBON	4.7K	5%	1/4W
R205	1-249-425-11	CARBON	4.7K	5%	1/4W
R206	1-249-417-11	CARBON	1K	5%	1/4W
R207	1-249-417-11	CARBON	1K	5%	1/4W
R208	1-249-423-11	CARBON	3.3K	5%	1/4W
R209	1-249-413-11	CARBON	470	5%	1/4W
R210	1-249-429-11	CARBON	10K	5%	1/4W
R211	1-249-410-11	CARBON	270	5%	1/4W
R212	1-249-385-11	CARBON	2.2	5%	1/6W
R213	1-249-385-11	CARBON	2.2	5%	1/6W
R214	1-249-417-11	CARBON	1K	5%	1/4W
R301	1-249-417-11	CARBON	1K	5%	1/4W
R302	1-249-417-11	CARBON	1K	5%	1/4W
R303	1-249-421-11	CARBON	2.2K	5%	1/4W
R304	1-249-417-11	CARBON	1K	5%	1/4W
R311	1-249-423-11	CARBON	3.3K	5%	1/4W
R312	1-249-429-11	CARBON	10K	5%	1/4W
R313	1-249-423-11	CARBON	3.3K	5%	1/4W
R314	1-249-429-11	CARBON	10K	5%	1/4W
R315	1-249-417-11	CARBON	1K	5%	1/4W
R316	1-249-417-11	CARBON	1K	5%	1/4W
R317	1-249-420-11	CARBON	1.8K	5%	1/4W
R318	1-249-441-11	CARBON	100K	5%	1/4W
R321	1-249-417-11	CARBON	1K	5%	1/4W
R322	1-249-417-11	CARBON	1K	5%	1/4W
R323	1-249-417-11	CARBON	1K	5%	1/4W
R324	1-249-418-11	CARBON	1.2K	5%	1/4W

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

MAIN

Ref. No.	Part No.	Description			Remark
R331	1-249-409-11	CARBON	220	5% 1/4W	
R332	1-247-887-00	CARBON	220K	5% 1/4W	
R333	1-249-417-11	CARBON	1K	5% 1/4W	
R334	1-249-409-11	CARBON	220	5% 1/4W	
R341	1-249-393-11	CARBON	10	5% 1/4W	
R342	1-249-417-11	CARBON	1K	5% 1/4W	
R347	1-249-441-11	CARBON	100K	5% 1/4W	
R348	1-249-429-11	CARBON	10K	5% 1/4W	
R351	1-249-429-11	CARBON	10K	5% 1/4W	
R352	1-249-429-11	CARBON	10K	5% 1/4W	
R353	1-249-429-11	CARBON	10K	5% 1/4W	
R354	1-249-429-11	CARBON	10K	5% 1/4W	
R355	1-247-848-11	CARBON	5.1K	5% 1/4W	
R356	1-249-405-11	CARBON	100	5% 1/4W	
R361	1-247-838-00	CARBON	2K	5% 1/4W	
R362	1-247-838-00	CARBON	2K	5% 1/4W	
R363	1-247-838-00	CARBON	2K	5% 1/4W	
R364	1-247-838-00	CARBON	2K	5% 1/4W	
R365	1-249-432-11	CARBON	18K	5% 1/4W	
R366	1-249-432-11	CARBON	18K	5% 1/4W	
R367	1-249-432-11	CARBON	18K	5% 1/4W	
R368	1-249-432-11	CARBON	18K	5% 1/4W	
R369	1-249-419-11	CARBON	1.5K	5% 1/4W	
R370	1-249-419-11	CARBON	1.5K	5% 1/4W	
R371	1-249-419-11	CARBON	1.5K	5% 1/4W	
R372	1-249-419-11	CARBON	1.5K	5% 1/4W	
R373	1-247-887-00	CARBON	220K	5% 1/4W	
R374	1-247-887-00	CARBON	220K	5% 1/4W	
R375	1-249-409-11	CARBON	220	5% 1/4W	
R376	1-249-409-11	CARBON	220	5% 1/4W	
R377	1-249-409-11	CARBON	220	5% 1/4W	
R378	1-249-409-11	CARBON	220	5% 1/4W	
R379	1-249-425-11	CARBON	4.7K	5% 1/4W	
R380	1-249-425-11	CARBON	4.7K	5% 1/4W	
R381	1-249-425-11	CARBON	4.7K	5% 1/4W	
R382	1-249-425-11	CARBON	4.7K	5% 1/4W	
R383	1-249-414-11	CARBON	560	5% 1/4W	
R384	1-249-414-11	CARBON	560	5% 1/4W	
R391	1-249-417-11	CARBON	1K	5% 1/4W	
R395	1-249-429-11	CARBON	10K	5% 1/4W	

< SWITCH >

S201 ⚠· 1-571-722-11 SWITCH, VOLTAGE SELECTION (VOLTAGE SELECTOR) (E, EA)

< CRYSTAL >

X351 1-579-161-11 VIBRATOR, CRYSTAL

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
	* 1-636-967-11	POWER SW BOARD (MADE IN JAPAN)	
	* 1-637-596-11	POWER SW BOARD (MADE IN FRANCE)	
		**********	
		< SWITCH >	
S501	1-554-118-00	SWITCH, PUSH (1 KEY) (POWER)	

MISCELLANEOUS

	⚠· 1-574-127-31	CORD, POWER (MADE IN FRANCE:AEP)	
	⚠· 1-574-358-31	CORD, POWER (AUS)	
	⚠· 1-575-651-21	CORD, POWER	
	⚠· 1-575-653-21	CORD, POWER (E)	
	⚠· 1-590-379-11	CORD, POWER (UK)	
	1-575-160-11	WIRE, FLAT TYPE (22 CORE)	
	1-535-871-11	JUMPER, FILM (WITH TERMINAL)	
	* 1-636-966-11	DISPLAY BOARD (MADE IN JAPAN)	
	* 1-452-538-11	MAGNET	
	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
	⚠· 8-848-144-11	DEVICE, OPTICAL KSS-240A	
M101	X-4917-523-3	MOTOR ASSY (SLED)	
M102	X-4917-504-1	MOTOR ASSY (SPINDLE) (MADE IN JAPAN)	
M191	A-4604-363-A	MOTOR (L) ASSY	
PT101	⚠· 1-449-923-11	TRANSFORMER, POWER (E, EA)	
PT101	⚠· 1-449-925-11	TRANSFORMER, POWER (MADE IN FRANCE)	
PT101	⚠· 1-449-922-11	TRANSFORMER, POWER (MADE IN JAPAN:AEP, AUS)	

ACCESSORY & PACKING MATERIAL

	1-558-271-11	CORD, CONNECTION (MADE IN FRANCE)
	1-559-533-11	CORD, CONNECTION (MADE IN JAPAN)
	1-569-007-11	ADAPTOR, CONVERSION 2P (E)
	1-569-008-11	ADAPTOR, CONVERSION 2P (EA)
	* 3-795-629-11	INSTRUCTION (MADE IN JAPAN:AEP)
	* 4-922-998-01	CUSHION (MADE IN JAPAN:AEP, AUS)
	* 4-929-563-01	CUSHION (E, EA)
	* 4-941-548-01	LABEL, CLASS 1
	* 4-942-085-21	INDIVIDUAL CARTION (MADE IN JAPAN)
	* 4-942-788-11	INDIVIDUAL CARTION (MADE IN FRANCE)

HARDWARE LIST

#1	7-621-773-93	SCREW (PANEL 2.6 TP2) (MADE IN JAPAN)
#2	7-682-548-09	SCREW +BVTT 3X8 (S)
#3	7-682-547-09	SCREW +B 3X6
#4	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S (MADE IN JAPAN)
#5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
#6	7-682-547-04	SCREW +BVTT 3X6 (S)
#7	7-621-775-10	SCREW +B 2.6X4
#8	7-621-255-15	SCREW +P 2X3

9-956-188-11

Sony Corporation
Audio Group

English
91B0469-1
Printed in Japan
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Published by Customer Relations and Service Group

ST-D505/D705

SERVICE MANUAL

AEP Model
UK Model

Photo: ST-D505

SPECIFICATIONS

Tuner	
System	FM stereo
	FM/AM superheterodyne tuner
FM tuner section	
Tuning range	87.5 to 108 MHz
Antenna	75 ohms unbalanced
Intermediate frequency	10.7 MHz
SW1, SW2, MW/LW tuner section	
Tuning range	MW: 522 to 1,611 kHz (Italian model)
	531 to 1,602 kHz (AEP, UK, Germany models)
	LW: 144 to 288 kHz (Italian model)
	153 to 279 kHz (AEP, UK, Germany models)
Antenna	AM loop antenna
	External antenna terminal
Intermediate frequency	450 kHz
Power requirements	240 V AC, 50 Hz (UK model)
	220 V AC, 50 Hz (AEP, Germany, Italian models)
Power consumption	10 W
AC outlet	2 switched, total 450 W max.
Weight	Approx. 2.6 kg (5 lbs 12 oz)
Dimensions	Approx. 355 X 95 X 320 mm
	(w/h/d, including projections)
	(14 × 3 3/4 × 12 5/8 inches)

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

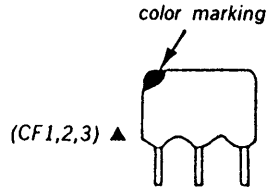
FM STEREO/FM-AM TUNER

SONY®

SECTION 1
SERVICING NOTES

Note on Ceramic Filter (CF1,2,3) ▲ Replacement.

This set employs three ceramic filters (CF1,2,3) ▲ which should have the same color marking to identify their center frequency. Therefore FM IF offset adjustment by * D609, * D610 is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.



○ : Mounted
× : not Mounted

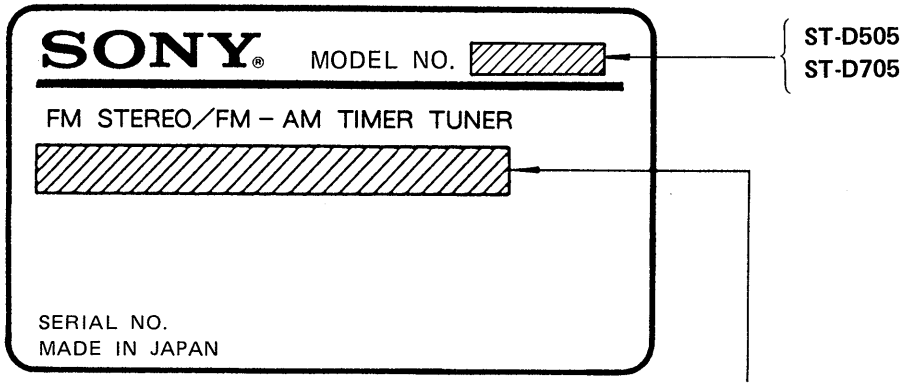
Ceramic filter		Mount		FM intermediate frequency (MHz)
Color mark	Center frequency (MHz)	* D609	* D610	
White	10.750	○	×	10.750
Red	10.700	×	×	10.700
Black	10.650	×	○	10.650

FM intermediate frequency is determined by the three types as shown above, Ceramic filters of same center frequency,i.e., of same color coding should be used for CF1, CF2, and CF3.

When replacing the ceramic filters, perform the FM Discriminator Adjustment.

▲ : AEP, UK Model : CF1, 2
Germany, IT Model: CF1, 2, 3

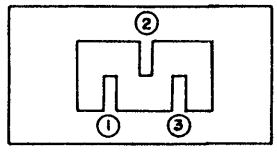
MODEL IDENTIFICATION
– Specification Label –



AEP, Germany, Italian Model: AC: 220V–230V ~50/60Hz
UK Model: AC: 240V ~ 50/60Hz

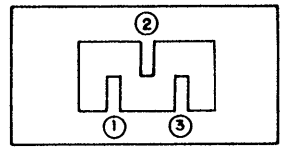
Signal of System Control Connector

CNJ901
SYSTEM CONTROL 1



1	L-CH OUT
2	GND
3	R-CH OUT

CNJ701
SYSTEM CONTROL 2

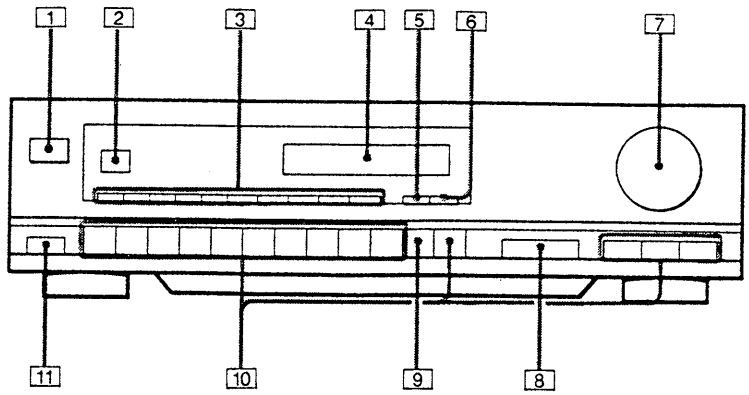


1	AUB
2	GND
3	

SECTION 2
GENERAL

This section is extracted from instruction manual.

LOCATION OF CONTROLS



Refer to the pages indicated in ● for details.

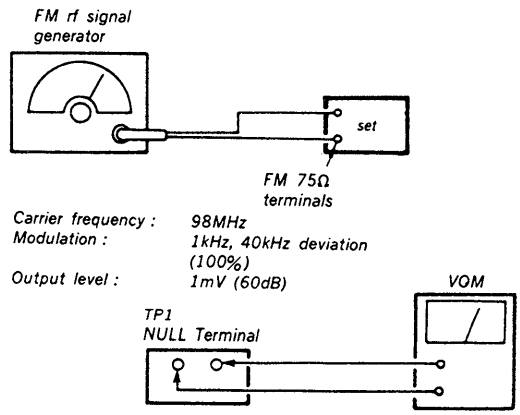
1 SYSTEM POWER switch ⑩
2 Remote sensor
3 Buttons for setting the clock and timer ㊹
4 Display window
5 STEREO/MUTE button ⑭
6 FREQUENCY/TIME button ㊿
7 TUNING control ⑮
8 BAND selector ⑬
9 MEMORY SCAN button ⑯
10 Buttons for storing station frequencies ⑰
11 SLEEP button ㊸

SECTION 3
ELECTRICAL ADJUSTMENTS

FM SECTION

FM DISCRIMINATOR ADJUSTMENT

Setting:



Carrier frequency : *98MHz*
Modulation : *1kHz, 40kHz deviation (100%)*
Output level : *1mV (60dB)*

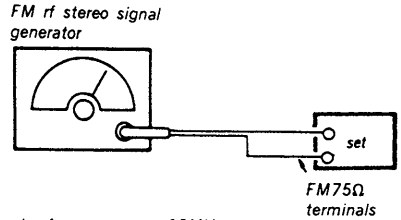
Procedure :

1. Tune the set to 98MHz.
2. Adjust T21 for 0V reading on the VOM.

Note : FM tuning level adjustment should be made after FM discriminator alignment.

FM TUNING LEVEL ADJUSTMENT

Setting :



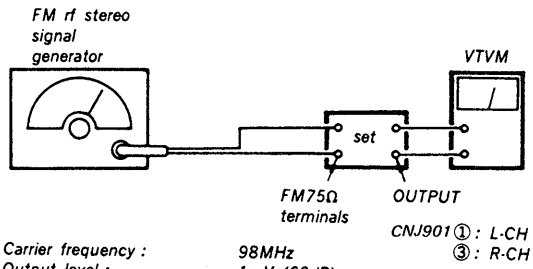
Carrier frequency : *98MHz*
Modulation : *1kHz, 40kHz deviation (100%)*
Output level : *17.8μV (25dB)*

Procedure :

1. Tune the set to 98MHz.
2. Adjust RV24 so that the TUNED LED goes on.

FM STEREO SEPARATION ADJUSTMENT

Procedure :



Carrier frequency : *98MHz*
Output level : *1mV (60dB)*
Modulation
Audio 400Hz : *16.25kHz deviation*
Sub channel 38kHz : *16.25kHz deviation*
Pilot signal 19kHz : *7.5kHz deviation*

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV21 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV21 for minimum reading.

L-CH Stereo separation : Ⓐ − Ⓑ
R-CH Stereo separation : Ⓒ − Ⓓ

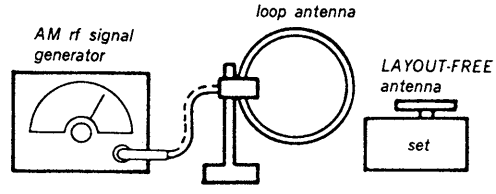
The separations of both channels should be equal.

MW/LW SECTION

AM TUNING LEVEL ADJUSTMENT

BAND select switch : LW

Setting :



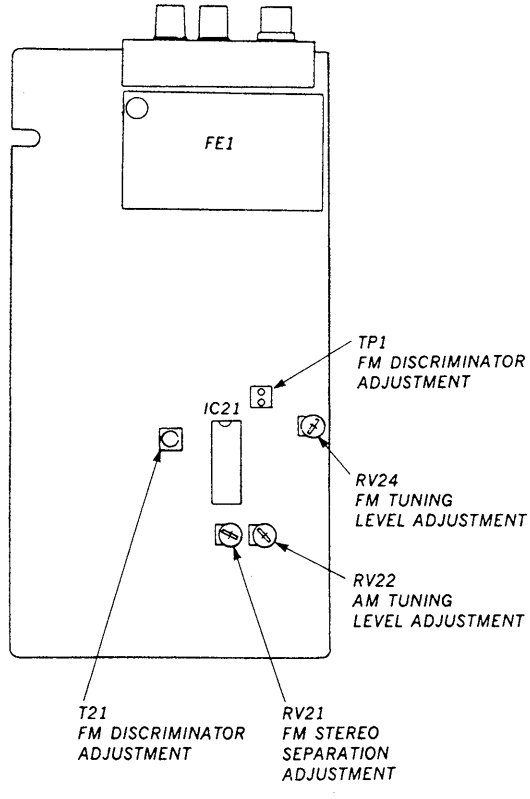
Carrier frequency : *216kHz*
Modulation : *400Hz, 30% modulation*

Procedure :

1. Set loop antenna so that the LAYOUT-FREE antenna input level becomes 2.5mV/m (68dB).
2. Tune the set to 216kHz.
3. Adjust the RV22 so that the TUNED LED goes on.

Adjustment Location :

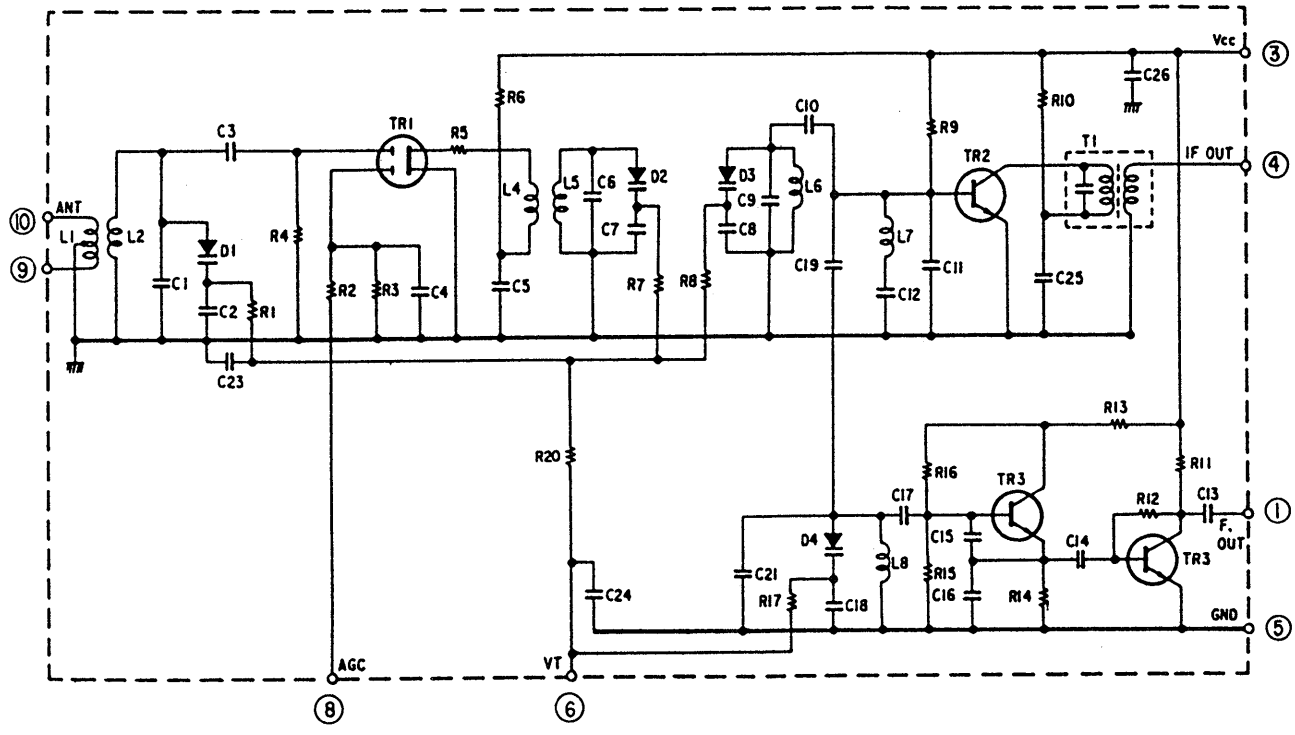
—tuner board—



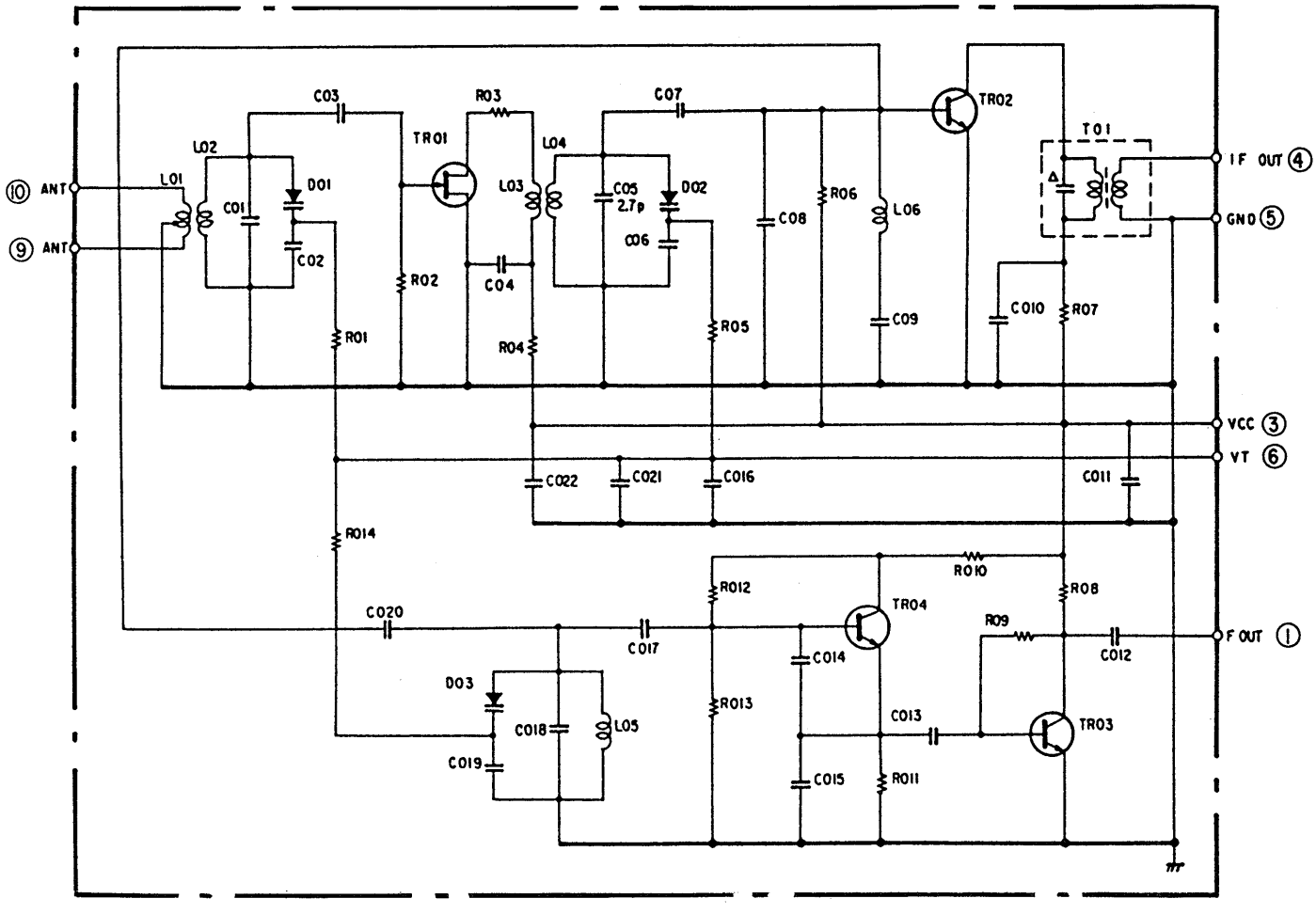
SECTION 4
DIAGRAMS

4-1. FM FRONT-END (FE1) SCHEMATIC DIAGRAMS

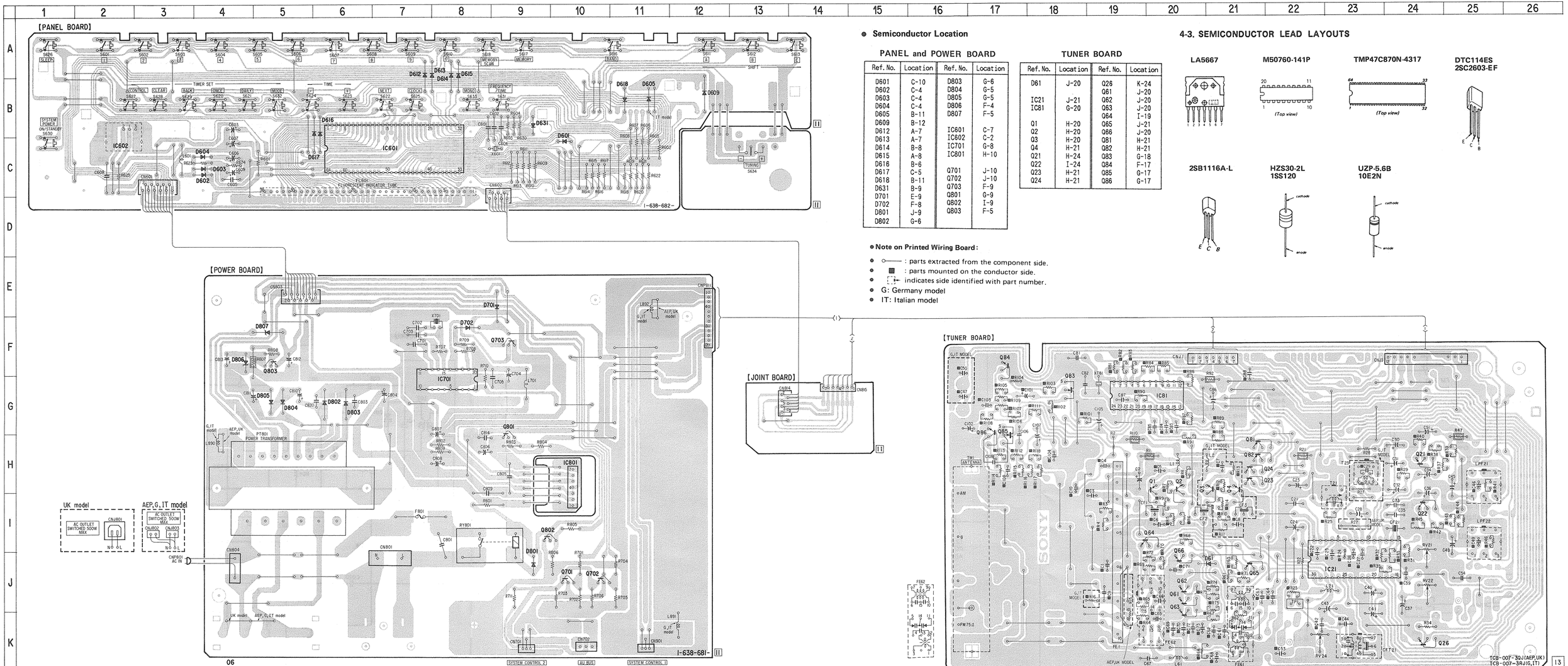
(Germany, Italian Model)



(AEP, UK Model)



4-2. PRINTED WIRING BOARDS



● **Semiconductor Location**

PANEL and POWER BOARD

Ref. No.	Location	Ref. No.	Location
D601	C-10	D803	G-6
D602	C-4	D804	G-5
D603	C-4	D805	G-5
D604	C-4	D806	F-4
D605	B-11	D807	F-5
D609	B-12		
D612	A-7	IC601	C-7
D613	A-7	IC602	C-2
D614	B-8	IC701	G-8
D615	A-8	IC801	H-10
D616	B-6		
D617	C-5	Q701	J-10
D618	B-11	Q702	J-10
D631	B-9	Q703	F-9
D701	E-9	Q801	G-9
D702	F-8	Q802	I-9
D801	J-9	Q803	F-5
D802	G-6		

TUNER BOARD

Ref. No.	Location	Ref. No.	Location
D61	J-20	Q26	K-24
		Q61	J-20
IC21	J-21	Q62	J-20
IC81	G-20	Q63	J-20
		Q64	I-19
Q1	H-20	Q65	J-21
Q2	H-20	Q66	J-20
Q3	H-20	Q81	H-21
Q4	H-21	Q82	H-21
Q21	H-24	Q83	G-18
Q22	I-24	Q84	F-17
Q23	H-21	Q85	G-17
Q24	H-21	Q86	G-17

● **Note on Printed Wiring Board:**

- ○—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ⊣⊢ indicates side identified with part number.
- G: Germany model
- IT: Italian model

4-3. SEMICONDUCTOR LEAD LAYOUTS

LA5667

M50760-141P

TMP47C870N-4317

DTC114ES
2SC2603-EF

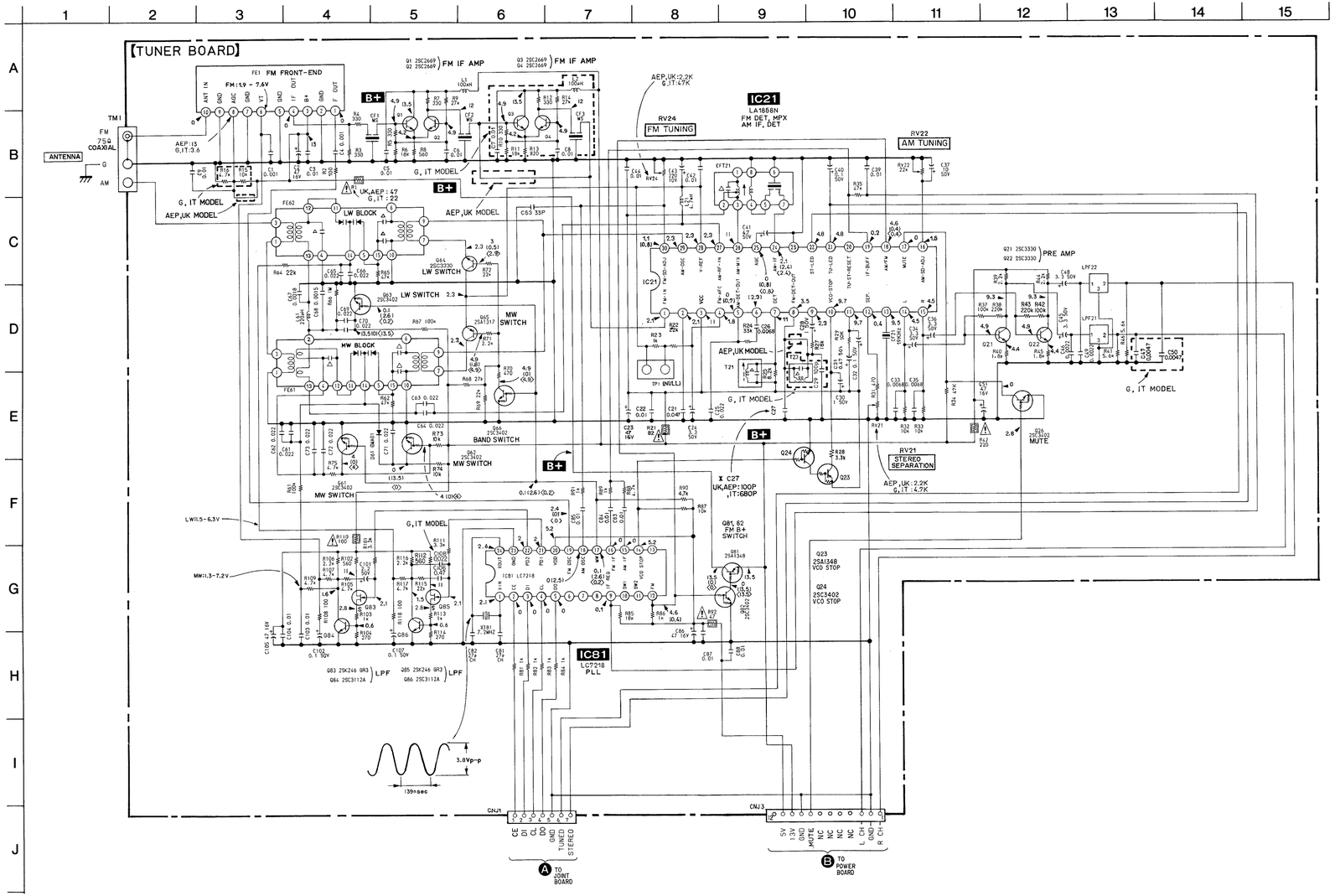
2SB1116A-L

HZS30-2L
1SS120

UZP-5.6B
10E2N

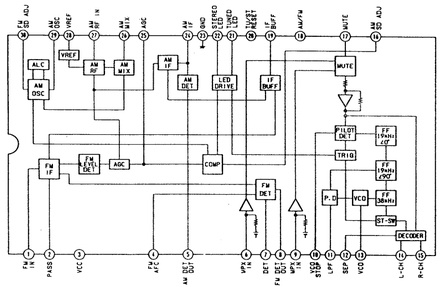
4-4. SCHEMATIC DIAGRAM —TUNER SECTION—

● See page 11 for note.

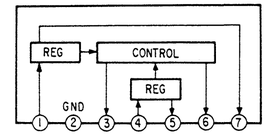


4-5. IC BLOCK DIAGRAMS

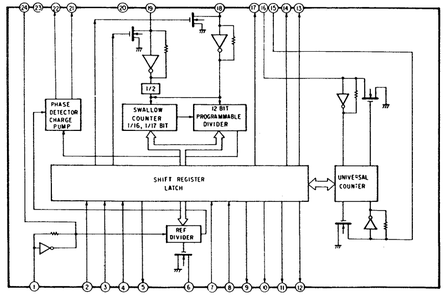
IC21 LA1851N



IC801 LA5667



IC81 LC7218



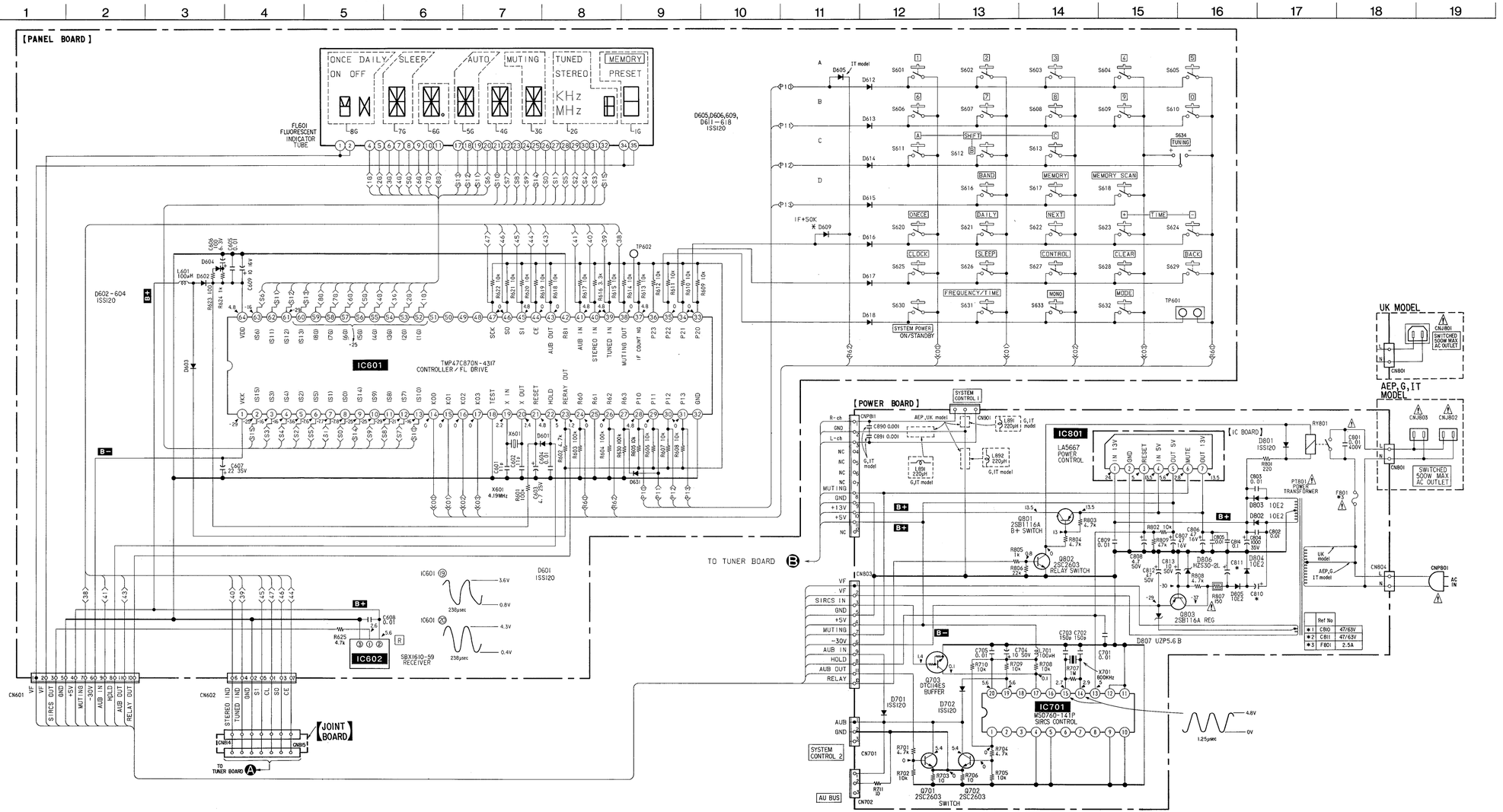
● **Note on Schematic Diagram:**

- ＊D609, ＊D610: See page 2 for Note on Ceramic Filter (CF1, 2, 3) ▲ Replacement.
- All capacitors are in μF unless otherwise noted. uF: μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ⊣W⊢ : nonflammable resistor.
- B+ : B+ line.
- B− : B− line.
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.

  no mark : FM
  ( ) : AM
  < > : LW
- Voltages are taken with a VOM. (Input impedance 10MΩ) Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
- G: Germany model
- IT: Italian model

4-6. SCHEMATIC DIAGRAM
—PANEL AND POWER SUPPLY SECTION—

● See page 11 for note.



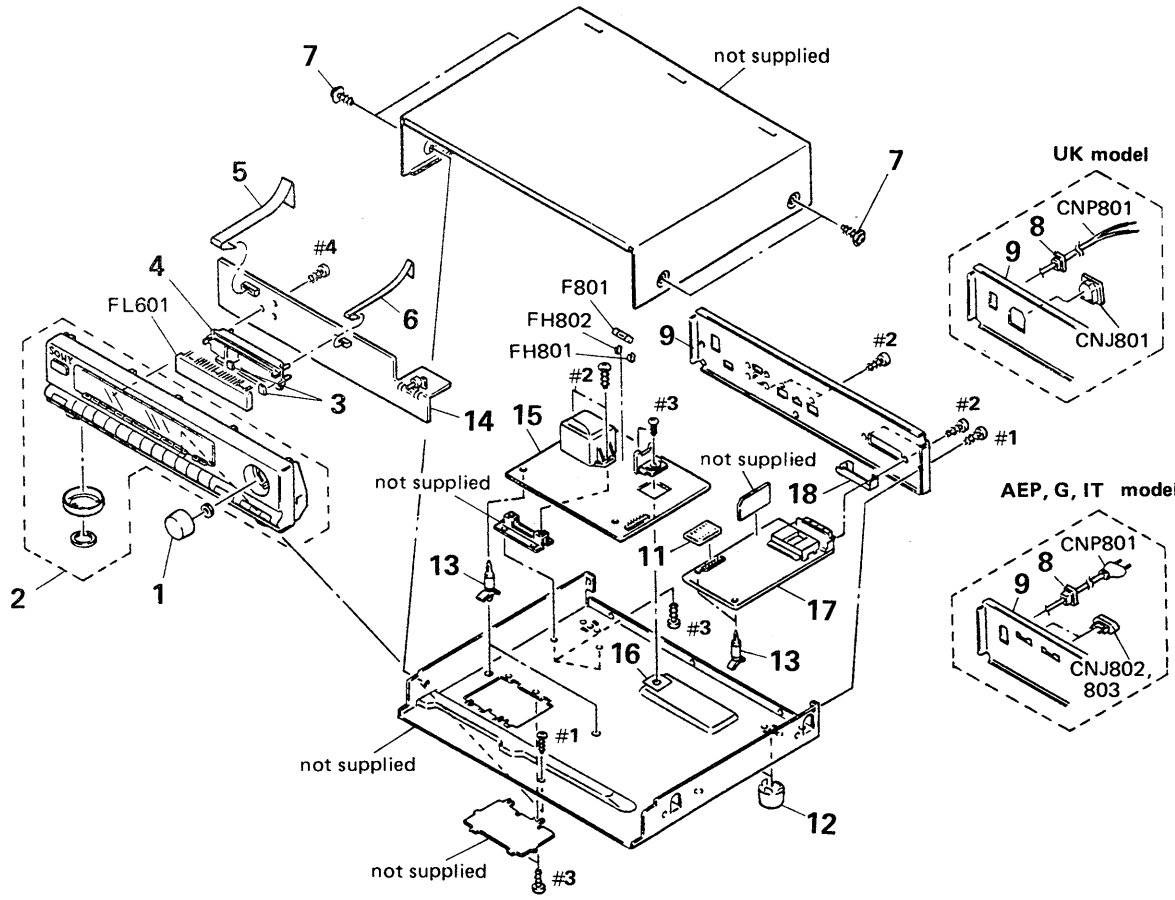
SECTION 5 EXPLODED VIEW

NOTE:

- –XX, –X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ Parts color ↑ Cabinet's color
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- G: Germany model
- IT: Italian model



Ref. No.	Part No.	Description	Remark
1	4-930-861-01	KNOB	
2	X-4941-446-1	PANEL ASSY, FRONT (D505: AEP, UK, G)	
2	X-4941-445-1	PANEL ASSY, FRONT (D505: IT)	
2	X-4941-447-1	PANEL ASSY, FRONT (D705: AEP, UK, G)	
2	X-4941-448-1	PANEL ASSY, FRONT (D705: IT)	
3	* 4-921-941-31	CUSHION (FL)	
4	* 4-923-103-01	HOLDER, FL TUBE	
5	1-575-666-11	WIRE, FLAT TYPE (11 CORE)	
6	* 1-575-851-11	WIRE, FLAT TYPE (7 CORE)	
7	3-363-099-01	SCREW (CASE +3X8 TP2)	
8	* 3-703-244-00	BUSHING (2104), CORD	
9	* 4-943-332-11	PANEL, BACK (D505: AEP)	
9	* 4-943-332-21	PANEL, BACK (D505: UK)	
9	* 4-943-332-31	PANEL, BACK (D505: G)	
9	* 4-943-332-41	PANEL, BACK (D505: IT)	
9	* 4-943-816-11	PANEL, BACK (D705: AEP)	
9	* 4-943-816-21	PANEL, BACK (D705: UK)	
9	* 4-943-816-31	PANEL, BACK (D705: G)	
9	* 4-943-816-41	PANEL, BACK (D705: IT)	
11	* 1-573-066-11	CONNECTOR, BOARD TO BOARD 12P	
12	4-931-169-01	FOOT	
13	* 4-924-098-31	HOLDER, PC BOARD	

Ref. No.	Part No.	Description	Remark
14	* A-4341-669-A	PANEL BOARD, COMPLETE (AEP)	
14	* A-4341-673-A	PANEL BOARD, COMPLETE (UK)	
14	* A-4341-676-A	PANEL BOARD, COMPLETE (G)	
14	* A-4341-677-A	PANEL BOARD, COMPLETE (IT)	
15	* A-4341-668-A	POWER BOARD, COMPLETE (AEP)	
15	* A-4341-670-A	POWER BOARD, COMPLETE (UK)	
15	* A-4341-675-A	POWER BOARD, COMPLETE (G, IT)	
16	* 4-937-354-01	SHEET	
17	1-589-204-11	PC BOARD, MOUNTED (AEP, UK)	
17	1-589-210-11	PC BOARD, MOUNTED (G, IT)	
18	* 4-924-988-11	PLATE (ST), GROUND	
⚠CNJ801	1-526-751-11	OUTLET, AC (UK)	
⚠CNJ802	1-526-794-11	OUTLET, AC (AEP, G, IT)	
⚠CNJ803	1-526-794-11	OUTLET, AC (AEP, G, IT)	
⚠CNP801	1-575-652-11	CORD, POWER (UK)	
⚠CNP801	1-575-651-11	CORD, POWER (AEP, G, IT)	
F801 ⚠	1-532-286-00	FUSE, TIME-LAG (2.5A)	
FH801	* 1-533-213-31	HOLDER, FUSE	
FH802	* 1-533-213-31	HOLDER, FUSE	
FL601	1-519-595-21	INDICATOR TUBE, FLUORESCENT	

PANEL **POWER**

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- –XX, –X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF: μF
- COILS
  uH: μH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- G: Germany model
- IT: Italian model

Ref. No.	Part No.	Description			Remark
	* A-4341-669-A	PANEL BOARD, COMPLETE (AEP)			
	* A-4341-673-A	PANEL BOARD, COMPLETE (UK)			
	* A-4341-676-A	PANEL BOARD, COMPLETE (G)			
	* A-4341-677-A	PANEL BOARD, COMPLETE (IT)			
	* A-4341-668-A	POWER BOARD, COMPLETE (AEP)			
	* A-4341-670-A	POWER BOARD, COMPLETE (UK)			
	* A-4341-675-A	POWER BOARD, COMPLETE (G, IT)			
		**********			
	* 1-573-068-11	CONNECTOR, BOARD TO BOARD 12P			
	* 4-921-941-31	CUSHION (FL)			
	* 4-923-103-01	HOLDER, FL TUBE			
		< CAPACITOR >			
C601	1-162-200-31	CERAMIC	11PF	5% 50V	
C602	1-162-200-31	CERAMIC	11PF	5% 50V	
C603	1-126-163-11	ELECT	4.7uF	20% 50V	
C604	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C605	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C606	1-126-177-11	ELECT	100uF	20% 10V	
C607	1-123-357-00	ELECT	22uF	20% 35V	
C608	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C609	1-126-157-11	ELECT	10uF	20% 16V	
C701	1-164-096-11	CERAMIC	0.01uF	50V	
C702	1-162-284-31	CERAMIC	150PF	10% 50V	
C703	1-162-284-31	CERAMIC	150PF	10% 50V	
C704	1-126-059-11	ELECT	10uF	20% 50V	
C705	1-164-096-11	CERAMIC	0.01uF	50V	
C801	1-161-744-00	CERAMIC	0.01uF	400V	
C802	1-101-004-00	CERAMIC	0.01uF	50V	
C803	1-101-004-00	CERAMIC	0.01uF	50V	
C804	1-126-105-11	ELECT	1000uF	20% 35V	
C805	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C806	1-126-022-11	ELECT	47uF	20% 16V	
C807	1-126-022-11	ELECT	47uF	20% 16V	
C808	1-126-163-11	ELECT	4.7uF	20% 50V	
C809	1-164-096-11	CERAMIC	0.01uF	50V	
C810	1-124-918-11	ELECT	47uF	20% 63V	
C811	1-124-918-11	ELECT	47uF	20% 63V	
C812	1-124-910-11	ELECT	47uF	20% 50V	
C813	1-126-059-11	ELECT	10uF	20% 50V	
C814	1-136-165-00	FILM	0.1uF	5% 50V	
C890	1-162-294-31	CERAMIC	0.001uF	(G, IT)	
C891	1-162-294-31	CERAMIC	0.001uF	(G, IT)	
		< CONNECTOR >			
CN601	* 1-568-830-11	SOCKET, CONNECTOR 11P			
CN602	* 1-568-826-11	SOCKET, CONNECTOR 7P			
CN701	* 1-569-625-11	SOCKET, CONNECTOR 3P (SYSTEM CONTROL 2)			
CN702	* 1-565-561-11	PIN, CONNECTOR 3P (AU BUS) (EXCEPT UK)			
CN702	* 1-568-545-11	SOCKET, CONNECTOR (PC BOARD) 3P (AU BUS) (UK)			
CN801	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P			
CN803	* 1-568-830-11	SOCKET, CONNECTOR 11P			
CN804	* 1-564-321-00	PIN, CONNECTOR 2P			
CN814	* 1-568-826-11	SOCKET, CONNECTOR 7P			
CN815	* 1-565-346-11	SOCKET, CONNECTOR (PC BAORD) 7P			
CN901	* 1-569-625-41	SOCKET, CONNECTOR 3P (SYSTEM CONTROL 1)			

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D601	8-719-912-20	DIODE 1SS120	
D602	8-719-912-20	DIODE 1SS120	
D603	8-719-912-20	DIODE 1SS120	
D604	8-719-912-20	DIODE 1SS120	
D605	8-719-912-20	DIODE 1SS120 (IT)	
D609	8-719-912-20	DIODE 1SS120	
D612	8-719-912-20	DIODE 1SS120	
D613	8-719-912-20	DIODE 1SS120	
D614	8-719-912-20	DIODE 1SS120	
D615	8-719-912-20	DIODE 1SS120	
D616	8-719-912-20	DIODE 1SS120	
D617	8-719-912-20	DIODE 1SS120	
D618	8-719-912-20	DIODE 1SS120	
D631	8-719-912-20	DIODE 1SS120	
D701	8-719-912-20	DIODE 1SS120	
D702	8-719-912-20	DIODE 1SS120	
D801	8-719-912-20	DIODE 1SS120	
D802	8-719-200-77	DIODE 10E2N	
D803	8-719-200-77	DIODE 10E2N	
D804	8-719-200-77	DIODE 10E2N	
D805	8-719-200-77	DIODE 10E2N	
D806	8-719-934-22	DIODE HZS30-2L	
D807	8-719-014-66	DIODE UZP-5.6B	
		< HOLDER >	
FH801	* 1-533-213-31	HOLDER, FUSE	
FH802	* 1-533-213-31	HOLDER, FUSE	
		< INDICATOR TUBE >	
FL601	1-519-595-21	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC601	8-759-246-20	IC TMP47C870N-4317	
IC602	8-741-100-48	IC SBX1610-59	
IC701	8-759-634-73	IC M50760-141P	
IC801	8-759-820-09	IC LA5667	
		< COIL >	
L601	1-410-521-11	INDUCTOR 100uH	
L701	1-410-521-11	INDUCTOR 100uH	
L890	1-410-525-11	INDUCTOR 220uH (G, IT)	
L891	1-410-525-11	INDUCTOR 220uH (G, IT)	
L892	1-410-525-11	INDUCTOR 220uH (G, IT)	
		< TRANSFORMER >	
PT801 ⚠	1-449-979-11	TRANSFORMER, POWER	

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q701	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q702	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q703	8-729-900-80	TRANSISTOR DTC114ES			
Q801	8-729-140-04	TRANSISTOR 2SB1116A-LK			
Q802	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q803	8-729-140-04	TRANSISTOR 2SB1116A-LK			
		< RESISTOR >			
R601	1-249-441-11	CARBON	100K	5%	1/4W
R602	1-249-425-11	CARBON	4.7K	5%	1/4W
R603	1-249-441-11	CARBON	100K	5%	1/4W
R604	1-249-441-11	CARBON	100K	5%	1/4W
R605	1-249-429-11	CARBON	10K	5%	1/4W
R606	1-249-429-11	CARBON	10K	5%	1/4W
R607	1-249-429-11	CARBON	10K	5%	1/4W
R608	1-249-429-11	CARBON	10K	5%	1/4W
R609	1-249-429-11	CARBON	10K	5%	1/4W
R610	1-249-429-11	CARBON	10K	5%	1/4W
R611	1-249-429-11	CARBON	10K	5%	1/4W
R612	1-249-429-11	CARBON	10K	5%	1/4W
R613	1-249-429-11	CARBON	10K	5%	1/4W
R614	1-249-429-11	CARBON	10K	5%	1/4W
R615	1-249-429-11	CARBON	10K	5%	1/4W
R616	1-249-423-11	CARBON	3.3K	5%	1/4W
R617	1-249-429-11	CARBON	10K	5%	1/4W
R618	1-249-429-11	CARBON	10K	5%	1/4W
R619	1-249-429-11	CARBON	10K	5%	1/4W
R620	1-249-429-11	CARBON	10K	5%	1/4W
R621	1-249-429-11	CARBON	10K	5%	1/4W
R622	1-249-429-11	CARBON	10K	5%	1/4W
R623	1-249-405-11	CARBON	100	5%	1/4W
R624	1-249-417-11	CARBON	1K	5%	1/4W
R625	1-249-425-11	CARBON	4.7K	5%	1/4W
R701	1-249-425-11	CARBON	4.7K	5%	1/4W
R702	1-249-429-11	CARBON	10K	5%	1/4W
R703	1-249-393-11	CARBON	10	5%	1/4W
R704	1-249-425-11	CARBON	4.7K	5%	1/4W
R705	1-249-429-11	CARBON	10K	5%	1/4W
R706	1-249-393-11	CARBON	10	5%	1/4W
R707	1-247-903-00	CARBON	1M	5%	1/4W
R708	1-249-429-11	CARBON	10K	5%	1/4W
R709	1-249-429-11	CARBON	10K	5%	1/4W
R710	1-249-429-11	CARBON	10K	5%	1/4W
R711	1-249-393-11	CARBON	10	5%	1/4W
R801	1-247-743-11	CARBON	220	5%	1/2W
R802	1-249-429-11	CARBON	10K	5%	1/4W
R803	1-249-425-11	CARBON	4.7K	5%	1/4W
R804	1-249-425-11	CARBON	4.7K	5%	1/4W

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
R805	1-249-417-11	CARBON	1K	5% 1/4W	
R806	1-249-433-11	CARBON	22K	5% 1/4W	
R807 ⚠	1-247-702-11	CARBON	150	5% 1/4W	
R808	1-249-425-11	CARBON	4.7K	5% 1/4W	
R809	1-249-437-11	CARBON	47K	5% 1/4W	
RY801	1-515-617-11	RELAY			
		< SWITCH >			
S601	1-554-303-21	SWITCH, TACTILE (1)			
S602	1-554-303-21	SWITCH, TACTILE (2)			
S603	1-554-303-21	SWITCH, TACTILE (3)			
S604	1-554-303-21	SWITCH, TACTILE (4)			
S605	1-554-303-21	SWITCH, TACTILE (5)			
S606	1-554-303-21	SWITCH, TACTILE (6)			
S607	1-554-303-21	SWITCH, TACTILE (7)			
S608	1-554-303-21	SWITCH, TACTILE (8)			
S609	1-554-303-21	SWITCH, TACTILE (9)			
S610	1-554-303-21	SWITCH, TACTILE (0)			
S611	1-554-303-21	SWITCH, TACTILE (SHIFT A)			
S612	1-554-303-21	SWITCH, TACTILE (SHIFT B)			
S613	1-554-303-21	SWITCH, TACTILE (SHIFT C)			
S616	1-554-303-21	SWITCH, TACTILE (BAND)			
S617	1-554-303-21	SWITCH, TACTILE (MEMORY)			

Ref. No.	Part No.	Description	Remark
S618	1-554-303-21	SWITCH, TACTILE (MEMORY SCAN)	
S620	1-554-303-21	SWITCH, TACTILE (ONCE)	
S621	1-554-303-21	SWITCH, TACTILE (DAILY)	
S622	1-554-303-21	SWITCH, TACTILE (NEXT)	
S623	1-554-303-21	SWITCH, TACTILE (TIME +)	
S624	1-554-303-21	SWITCH, TACTILE (TIME -)	
S625	1-554-303-21	SWITCH, TACTILE (CLOCK)	
S626	1-554-303-21	SWITCH, TACTILE (SLEEP)	
S627	1-554-303-21	SWITCH, TACTILE (CONTROL)	
S628	1-554-303-21	SWITCH, TACTILE (CLEAR)	
S629	1-554-303-21	SWITCH, TACTILE (BACK)	
S630	1-554-303-21	SWITCH, TACTILE (SYSTEKM POWER)	
S631	1-554-303-21	SWITCH, TACTILE (FREQUENCY/TIME)	
S632	1-554-303-21	SWITCH, TACTILE (MODE)	
S633	1-554-303-21	SWITCH, TACTILE (MONO)	
S634	1-571-955-11	SWITCH, ROTARY (TUNING)	
		< CRYSTAL >	
X601	1-567-821-21	VIBRATOR, CRYSTAL (4.19MHz)	
X701	1-578-699-11	OSCILLATOR, CERAMIC (800KHz)	

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Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- G: Germany model
- IT: Italian model

TUNER SECTION

Ref.No.	Part No.	Description				
C1	1-162-294-31	CERAMIC CHIP	0.001MF	20%	25V	
C2	1-126-101-11	ELECT	100MF	20%	16V	
C3	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C4	1-162-294-31	CERAMIC CHIP	0.001MF	20%	25V	
C5	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C6	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C7	1-163-059-00	(G,IT)....CERAMIC MELF	0.01MF	20%	16V	
C8	1-163-059-00	(G,IT)....CERAMIC MELF	0.01MF	20%	16V	
C9	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C11	1-101-005-00	(G,IT)....CERAMIC	0.022MF		50V	
C21	1-101-006-00	CERAMIC	0.047MF		50V	
C22	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C23	1-124-477-11	ELECT	47MF	20%	16V	
C24	1-123-382-00	ELECT	3.3MF	20%	50V	
C25	1-163-063-00	CERAMIC MELF	0.022MF		25V	
C26	1-163-019-00	CERAMIC CHIP	0.0068	20%	12V	
C27	1-162-516-11	(AEP,UK)..CERAMIC CHIP	100PF	10%	50V	
C27	1-163-007-11	(G,IT)....CERAMIC CHIP	680PF	20%	50V	
C28	1-124-791-11	ELECT	1.0MF	20%	50V	
C29	1-162-516-11	(G,IT)....CERAMIC CHIP	100PF	10%	50V	
C30	1-124-791-11	ELECT	1.0MF	20%	50V	
C31	1-124-902-00	ELECT	0.47MF	20%	50V	
C32	1-124-463-00	ELECT	0.1MF	20%	50V	
C33	1-130-481-00	FILM	0.0068MF	5%	50V	
C34	1-123-382-00	ELECT	3.3MF	20%	50V	
C35	1-130-481-00	FILM	0.0068MF	5%	50V	
C36	1-123-382-00	ELECT	3.3MF	20%	50V	
C37	1-123-875-11	ELECT	10MF	20%	50V	
C39	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C40	1-124-463-00	ELECT	0.1MF	20%	50V	
C41	1-124-927-11	ELECT	4.7MF	20%	50V	
C42	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C43	1-126-176-11	ELECT	220MF	20%	10V	
C44	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C45	1-123-382-00	ELECT	3.3MF	20%	50V	
C46	1-161-375-00	CERAMIC CHIP	0.0022MF	20%	25V	
C47	1-163-170-00	(G,IT)....CERAMIC CHIP	0.0047MF	20%	25V	
C48	1-123-382-00	ELECT	3.3MF	20%	50V	
C49	1-161-375-00	CERAMIC CHIP	0.0022MF	20%	25V	
C50	1-163-170-00	(G,IT)....CERAMIC CHIP	0.0047MF	20%	25V	
C51	1-124-477-11	ELECT	47MF	20%	16V	
C53	1-163-105-00	CERAMIC CHIP	33PF	5%	50V	
C54	1-101-005-00	(G,IT)....CERAMIC	0.022MF		50V	
C61	1-163-063-00	CERAMIC MELF	0.022MF		25V	
C62	1-163-063-00	CERAMIC MELF	0.022MF		25V	
C63	1-163-063-00	CERAMIC MELF	0.022MF		25V	
C64	1-163-063-00	CERAMIC MELF	0.022MF		25V	
C65	1-163-063-00	CERAMIC MELF	0.022MF		25V	
C66	1-163-063-00	CERAMIC MELF	0.022MF		25V	
C67	1-102-120-00	CERAMIC	0.0018MF	10%	50V	
C68	1-163-111-11	CERAMIC CHIP	0.0015MF	20%	25V	
C69	1-163-063-00	CERAMIC MELF	0.022MF		25V	
C70	1-163-063-00	CERAMIC MELF	0.022MF		25V	
C71	1-163-063-00	CERAMIC MELF	0.022MF		25V	
C72	1-163-063-00	CERAMIC MELF	0.022MF		25V	
C73	1-163-063-00	CERAMIC MELF	0.022MF		25V	
C81	1-102-961-00	CERAMIC	27PF	5%	50V	
C82	1-102-961-00	CERAMIC	27PF	5%	50V	
C83	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C84	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C85	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C86	1-124-477-11	ELECT	47MF	20%	16V	
C87	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C88	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C101	1-124-925-11	ELECT	2.2MF	20%	50V	
C102	1-124-463-00	ELECT	0.1MF	20%	50V	
C103	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C104	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V	
C105	1-124-477-11	ELECT	47MF	20%	16V	
C106	1-136-173-00	MYLAR	0.47MF	5%	50V	
C107	1-124-463-00	ELECT	0.1MF	20%	50V	
C108	1-163-063-00	(G,IT)....CERAMIC MELF	0.022MF		25V	
CF1	1-567-389-11	FILTER, CERAMIC				
CF2	1-567-389-11	FILTER, CERAMIC				
CF3	1-567-389-11	(G,IT).....FILTER, CERAMIC				
CF21	1-577-075-11	OSCILLATOR, CERAMIC (19kHz)				
CFT21	1-404-853-11	TRANSFORMER, IF (CERAMIC FILTER)				
CNJ1	*1-565-343-11	PIN, CONNECTOR 7P				
CNJ3	*1-573-067-11	CONNECTOR, BOARD TO BOARD 8P				
D61	8-719-912-20	DIODE 1SS120				
FE1	1-463-857-11	(G,IT).....FRONT END (FM)				
FE1	1-463-862-21	(AEP,UK)...FRONT END (FM)				
FE61	1-236-462-11	ENCAPSULATED COMPONENT (MW RF BLOCK)				
FE62	1-236-463-11	ENCAPSULATED COMPONENT (LW RF BLOCK)				
IC21	8-759-821-45	IC LA1851N				
IC81	8-759-820-91	IC LC7218				
L1	1-410-645-31	MICRO INDUCTOR 100UH				
L2	1-410-645-31	(G,IT)....MICRO INDUCTOR 100UH				
L21	1-407-500-00	MICRO INDUCTOR 4.7UH				
L61	1-410-525-11	MICRO INDUCTOR 220UH				
LPF21	1-235-164-00	FILTER, LOW PASS				
LPF22	1-235-164-00	FILTER, LOW PASS				

TUNER SECTION

Ref.No.	Part No.	Description
Q1	8-729-230-99	TRANSISTOR 2SC2669-0Y
Q2	8-729-230-99	TRANSISTOR 2SC2669-0Y
Q3	8-729-230-99	(G,IT)....TRANSISTOR 2SC2669-0Y
Q4	8-729-230-99	(G,IT)....TRANSISTOR 2SC2669-0Y
Q21	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q22	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q23	8-729-900-61	TRANSISTOR DTA114ES
Q24	8-729-900-80	TRANSISTOR DTC114ES
Q26	8-729-900-80	TRANSISTOR DTC114ES
Q61	8-729-900-80	TRANSISTOR DTC114ES
Q62	8-729-900-80	TRANSISTOR DTC114ES
Q63	8-729-900-80	TRANSISTOR DTC114ES
Q64	8-729-820-24	TRANSISTOR 2SC3330-T
Q65	8-729-821-04	TRANSISTOR 2SA1317-STU
Q66	8-729-900-80	TRANSISTOR DTC114ES
Q81	8-729-900-61	TRANSISTOR DTA114ES
Q82	8-729-900-80	TRANSISTOR DTC114ES
Q83	8-729-202-67	TRANSISTOR 2SK246-GR3
Q84	8-729-107-84	TRANSISTOR 2SC3113A
Q85	8-729-202-67	TRANSISTOR 2SK246-GR3
Q86	8-729-107-84	TRANSISTOR 2SC3113A
R1	⚠.1-249-397-11	(G,IT).....CARBON (SMALL)22 5% 1/4W F
R1	⚠.1-249-401-11	(AEP,UK)...CARBON (SMALL)47 5% 1/4W F
R3	1-249-329-11	CARBON MELF 330 5% 1/8W
R4	1-249-329-11	CARBON MELF 330 5% 1/8W
R5	1-249-329-11	CARBON MELF 330 5% 1/8W
R6	1-249-350-11	CARBON MELF 18K 5% 1/8W
R7	1-249-329-11	CARBON MELF 330 5% 1/8W
R8	1-249-332-11	CARBON MELF 560 5% 1/8W
R9	1-249-352-11	CARBON MELF 27K 5% 1/8W
R10	1-249-329-11	(G,IT)....CARBON MELF 330 5% 1/8W
R11	1-249-350-11	(G,IT)....CARBON MELF 18K 5% 1/8W
R12	1-249-329-11	(G,IT)....CARBON MELF 330 5% 1/8W
R13	1-249-334-11	(G,IT)....CARBON MELF 820 5% 1/8W
R14	1-249-352-11	(G,IT)....CARBON MELF 27K 5% 1/8W
R15	1-249-347-11	(G,IT)....CARBON MELF 10K 5% 1/8W
R16	1-249-343-11	(G,IT)....CARBON MELF 4.7K 5% 1/8W
R21	⚠.1-249-404-00	CARBON (SMALL)82 5% 1/4W F
R22	⚠.1-249-430-11	CARBON (SMALL)12K 5% 1/4W F
R23	1-249-335-11	CARBON MELF 1K 5% 1/8W
R24	1-249-353-11	CARBON MELF 33K 5% 1/8W
R25	1-249-346-11	CARBON MELF 8.2K 5% 1/8W
R26	1-249-340-11	(G,IT)....CARBON MELF 2.7K 5% 1/8W
R27	⚠.1-249-432-11	CARBON (SMALL)18K 5% 1/4W F
R28	1-249-423-11	CARBON (SMALL)3.3K 5% 1/4W
R29	1-249-347-11	CARBON MELF 10K 5% 1/8W
R31	1-249-331-11	CARBON MELF 470 5% 1/8W
R32	1-249-347-11	CARBON MELF 10K 5% 1/8W
R33	1-249-347-11	CARBON MELF 10K 5% 1/8W
R34	⚠.1-249-437-11	CARBON (SMALL)47K 5% 1/4W F
R35	1-249-355-11	CARBON MELF 47K 5% 1/8W
R37	1-249-359-11	CARBON MELF 100K 5% 1/8W
R38	1-249-363-11	CARBON MELF 220K 5% 1/8W
R39	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R40	1-249-338-11	CARBON MELF 1.8K 5% 1/8W
R41	1-249-344-11	CARBON MELF 5.6K 5% 1/8W
R42	1-249-359-11	CARBON MELF 100K 5% 1/8W
R43	1-249-363-11	CARBON MELF 220K 5% 1/8W
R44	1-249-339-11	CARBON MELF 2.2K 5% 1/8W

Ref.No.	Part No.	Description
R45	1-249-338-11	CARBON MELF 1.8K 5% 1/8W
R46	1-249-344-11	CARBON MELF 5.6K 5% 1/8W
R47	⚠.1-249-409-11	CARBON (SMALL)220 5% 1/4W F
R61	1-249-359-11	CARBON MELF 100K 5% 1/8W
R62	1-249-355-11	CARBON MELF 47K 5% 1/8W
R64	1-249-351-11	CARBON MELF 22K 5% 1/8W
R65	1-249-355-11	CARBON MELF 47K 5% 1/8W
R66	1-215-493-00	CARBON MELF 1M 5% 1/5W
R67	1-249-359-11	CARBON MELF 100K 5% 1/8W
R68	1-249-352-11	CARBON MELF 27K 5% 1/8W
R69	1-249-351-11	CARBON MELF 22K 5% 1/8W
R70	1-249-331-11	CARBON MELF 470 5% 1/8W
R71	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R72	1-249-351-11	CARBON MELF 22K 5% 1/8W
R73	1-249-347-11	CARBON MELF 10K 5% 1/8W
R74	1-249-347-11	CARBON MELF 10K 5% 1/8W
R75	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R81	1-249-335-11	CARBON MELF 1K 5% 1/8W
R82	1-249-335-11	CARBON MELF 1K 5% 1/8W
R83	1-249-335-11	CARBON MELF 1K 5% 1/8W
R84	1-249-335-11	CARBON MELF 1K 5% 1/8W
R85	1-249-347-11	CARBON MELF 10K 5% 1/8W
R86	1-249-335-11	CARBON MELF 1K 5% 1/8W
R87	1-249-347-11	CARBON MELF 10K 5% 1/8W
R88	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R89	1-249-335-11	CARBON MELF 1K 5% 1/8W
R90	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R91	1-249-335-11	CARBON MELF 1K 5% 1/8W
R92	⚠.1-249-401-11	CARBON (SMALL)47 5% 1/4W F
R101	1-249-341-11	CARBON MELF 3.3K 5% 1/8W
R102	1-249-332-11	CARBON MELF 560 5% 1/8W
R103	1-249-335-11	CARBON MELF 1K 5% 1/8W
R104	1-249-328-11	CARBON MELF 270 5% 1/8W
R105	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R106	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R107	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R108	1-249-323-11	CARBON MELF 100 5% 1/8W
R109	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R110	⚠.1-249-405-11	CARBON (SMALL)100 5% 1/4W F
R111	1-249-341-11	CARBON MELF 3.3K 5% 1/8W
R112	1-249-332-11	CARBON MELF 560 5% 1/8W
R113	1-249-335-11	CARBON MELF 1K 5% 1/8W
R114	1-249-328-11	CARBON MELF 270 5% 1/8W
R115	1-249-351-11	CARBON MELF 22K 5% 1/8W
R116	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R117	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R118	1-249-323-11	CARBON MELF 100 5% 1/8W
RV21	1-238-013-11	(AEP,UK)...RES, ADJ, CARBON 2.2K
RV21	1-238-015-11	(G,IT).....RES, ADJ, CARBON 4.7K
RV22	1-238-017-11	RES, ADJ, CARBON 22K
RV24	1-238-017-11	(AEP,UK)...RES, ADJ, CARBON 22K
RV24	1-238-019-11	(G,IT).....RES, ADJ, CARBON 47K
T21	1-404-807-11	TRANSFORMER, DISCRIMINATOR
T23	1-236-465-11	(G,IT)....ENCAPSULATED COMPONENT
TM1	*1-537-138-31	TERMINAL BOARD (ANT)(ANTENNA)
TP1	*1-560-060-00	PIN, CONNECTOR 2P
XT81	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
5	1-575-666-11	WIRE, FLAT TYPE (11 CORE)	
6	* 1-575-851-11	WIRE, FLAT TYPE (7 CORE)	
11	* 1-573-066-11	CONNECTOR, BOARD TO BOARD 12P	
17	1-589-204-11	PC BOARD, MOUNTED (AEP, UK)	
17	1-589-210-11	PC BOARD, MOUNTED (G, IT)	
⚠CNJ801	· 1-526-751-11	OUTLET, AC (UK)	
⚠CNJ802	· 1-526-794-11	OUTLET, AC (AEP, G, IT)	
⚠CNJ803	· 1-526-794-11	OUTLET, AC (AEP, G, IT)	
⚠CNP801	· 1-575-651-11	CORD, POWER (AEP, G, IT)	
⚠CNP801	· 1-575-652-11	CORD, POWER (UK)	
F801	⚠· 1-532-286-00	FUSE, TIME-LAG (2.5A)	
		**********	
		ACCESSORY & PACKING MATERIAL	
	3-312-970-00	SHEET, PROTECTION	
	* 4-929-563-01	CUSHION	
		**********	

HARDWARE LIST

#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S
#3	7-682-548-04	SCREW +BVTT 3X8 (S)
#4	7-621-773-93	SCREW (PANEL 2.6 TP2)

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

9-956-426-11

Sony Corporation
Audio Group

English
91D0659-1
Printed in Japan
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Published by Customer Relations and Service Group

PS-D705/D705P

SERVICE MANUAL

AEP Model
E Model
PS-D705

E Model
UK Model
PS-D705P

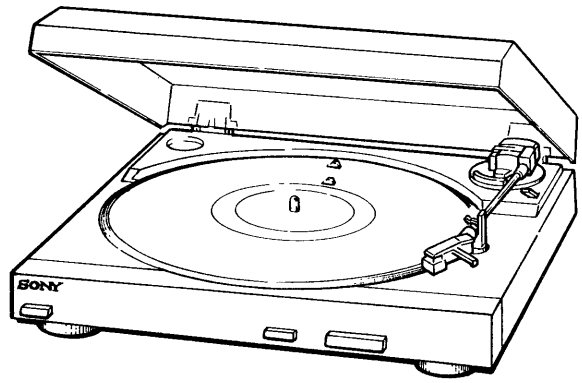


Photo: PS-D705

PS-D705P is the STEREO TURNTABLE SYSTEM in LBT-D505/D505CDM/ D705CD/D705CDM

SPECIFICATIONS

Turntable	
Platter	30cm (12 in.)
Motor	DC servo motor
Drive system	Belt drive
Speed	33⅓ rpm/45 rpm switchable
Wow and flutter	0.15% (WRMS)
Signal-to-noise ratio	65 dB (DIN-B)
Automatic system	Return, reject, lead in
Tonearm	
Type	Dynamically balanced
Pivot-to-stylus length	206 mm (7⅞ in.)
Overall arm length	235 mm (9⅜ in.)
Cartridge	
Type	Moving magnet type
Frequency response	20 Hz–20kHz
Stylus	ND-155G
General	
Dimensions	355×93.5×355 mm(w/h/d) (14×3¾×14 inches)
Weight	Approx. 2.6 kg (4 lb 14 oz)
Power requirements	D705: AEP, Germany, Italian models 220 V AC, 50/60 Hz D705: E, Saudi Arabia models 110–120 V, 220–240 V adjustable, 50/60 Hz
Power consumption	4 W
Accessory supplied	45-rpm adaptor (1)
Optional accessory	Replacement stylus ND-155G

Design and specificatins subject to change without notice.

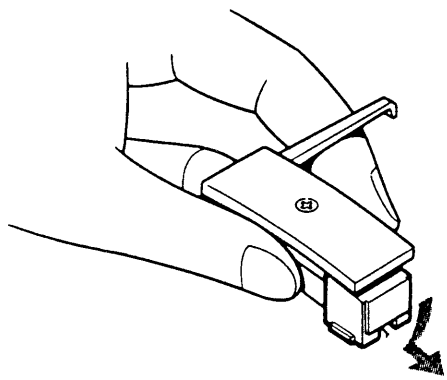
Note
This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

Note for Cartridge
Be careful not to use any cartridge except for specified one (Part No.: 4-944-756-01) as balance weight of pick up arm assy is fixed.

REPLACING THE STYLUS

Replace the stylus after about 400 hours of use because using a worn stylus will damage records.
An ND-155G replacement stylus is available at your Sony dealer. Be sure to turn the amplifier off before proceeding with replacement.

1 While holding the cartridge, detach the stylus assembly as illustrated.
2 Insert the new stylus into the cartridge.



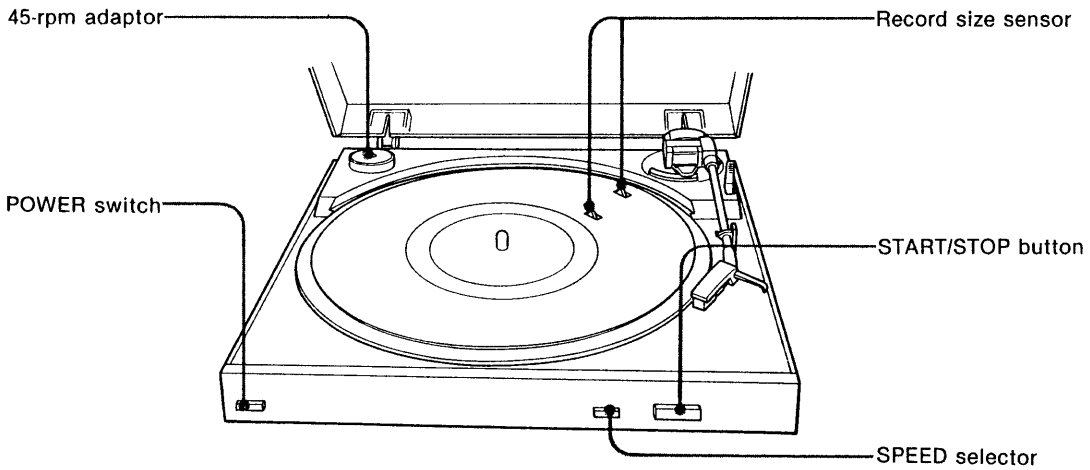
使用時は添付資料も参照のこと
Refer to the additional documents

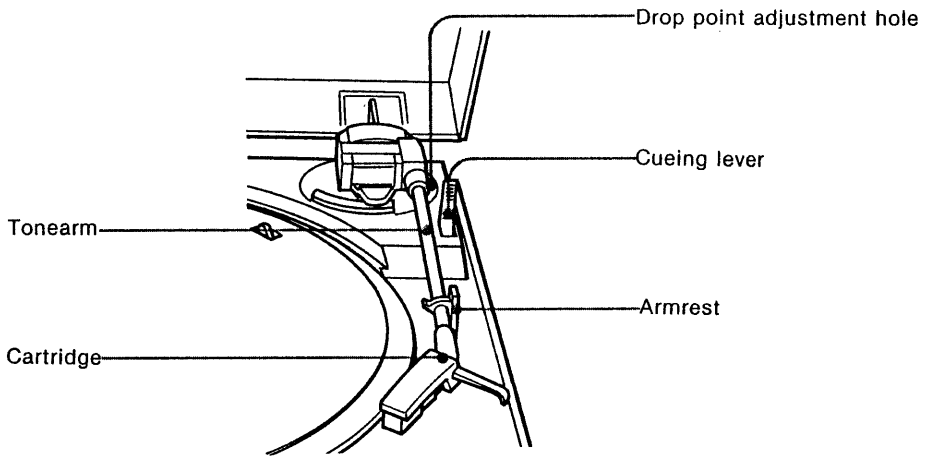
STEREO TURNTABLE SYSTEM

SONY®

SECTION 1
GENERAL

1-1. LOCATION OF CONTROLS

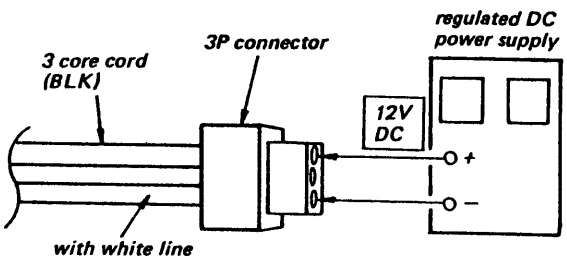




REPAIRING PRECAUTION (PS-D705P only)

[To supply B+ voltage]

The power of this unit is fed from HST-D505 or TA-V705. Because of this, connect the regulated power supply as illustrated right when this unit alone operates.

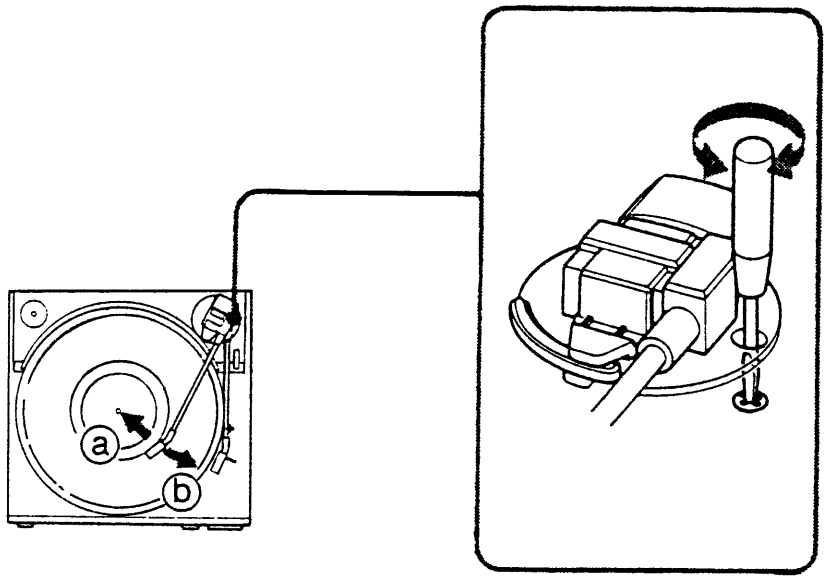


1-2. TONEARM DROP-POINT ADJUSTMENT

The tonearm drop-point during auto play has been factory-adjusted. If necessary, readjust it as follows.

To readjust the drop-point inward ⓐ, turn the screw clockwise with a screwdriver.
To readjust the drop-point outward ⓑ, turn the screw counterclockwise.

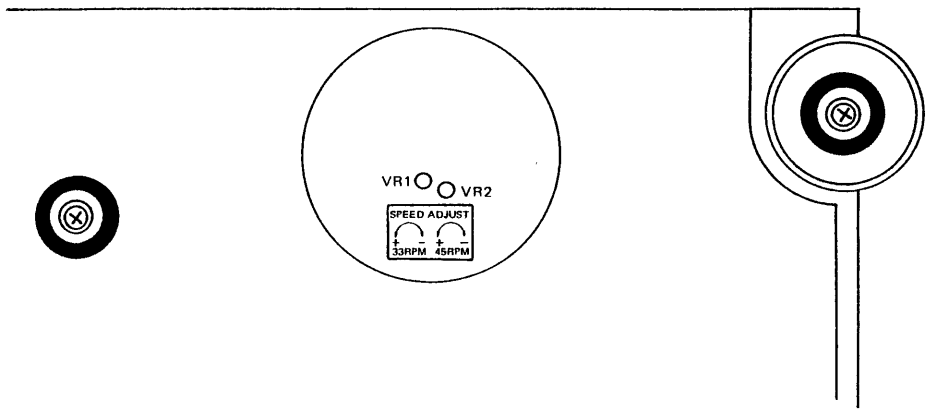
If the tonearm does not return to the arm rest automatically after play
Turn the adjustment screw counterclockwise.



1-3. Speed Adjustment

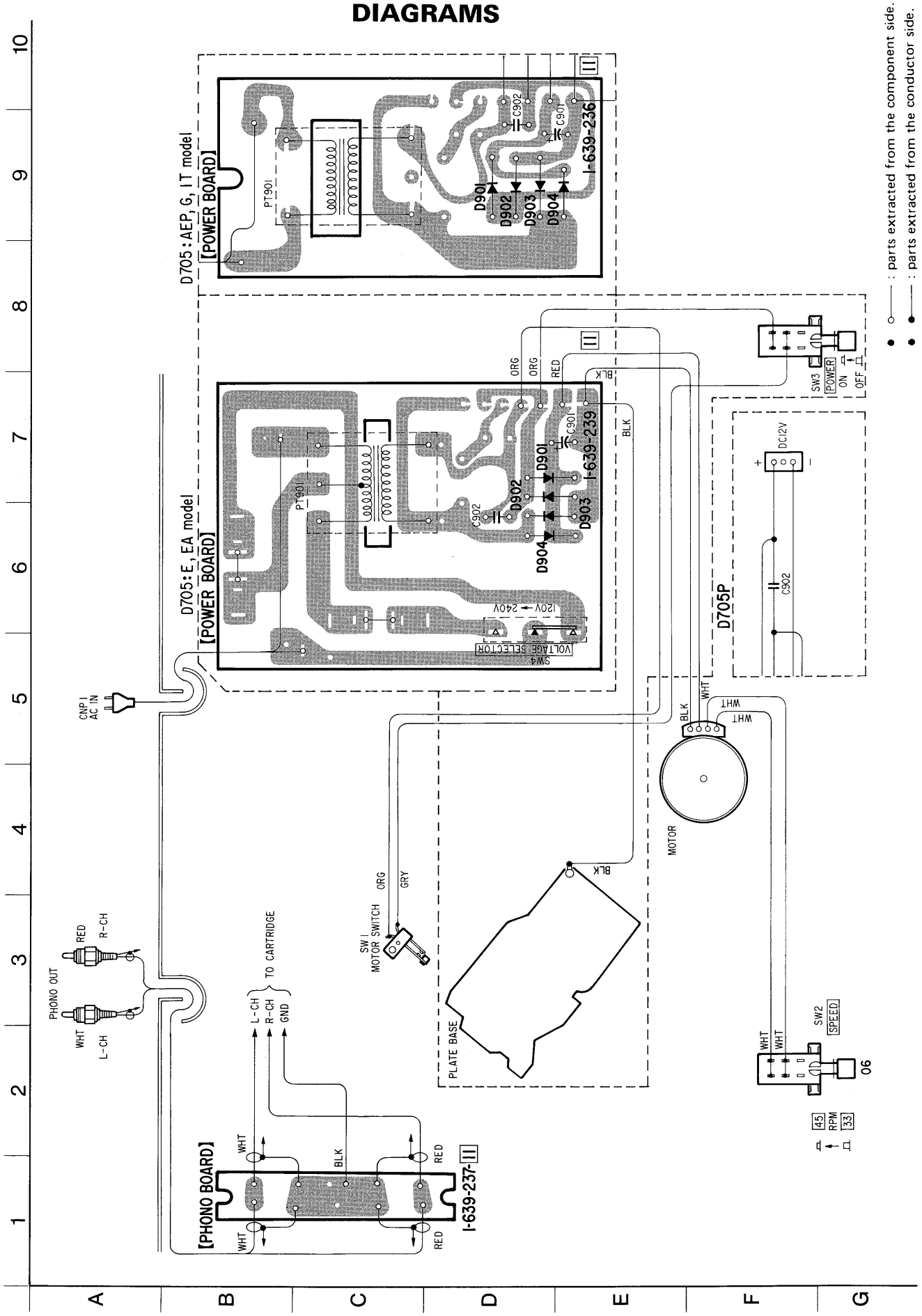
Note: Be sure to perform 45rpm adjustment before 33 rpm.

1. Place a stroboscope board on the turntable sheet.
2. Set the SPEED switch to 45.
   Press the START button.
   Adjust VR2 so that the stripped pattern of stroboscope board is stationary.
3. Set the SPEED switch to 33.
   Adjust VR1 in the same way.

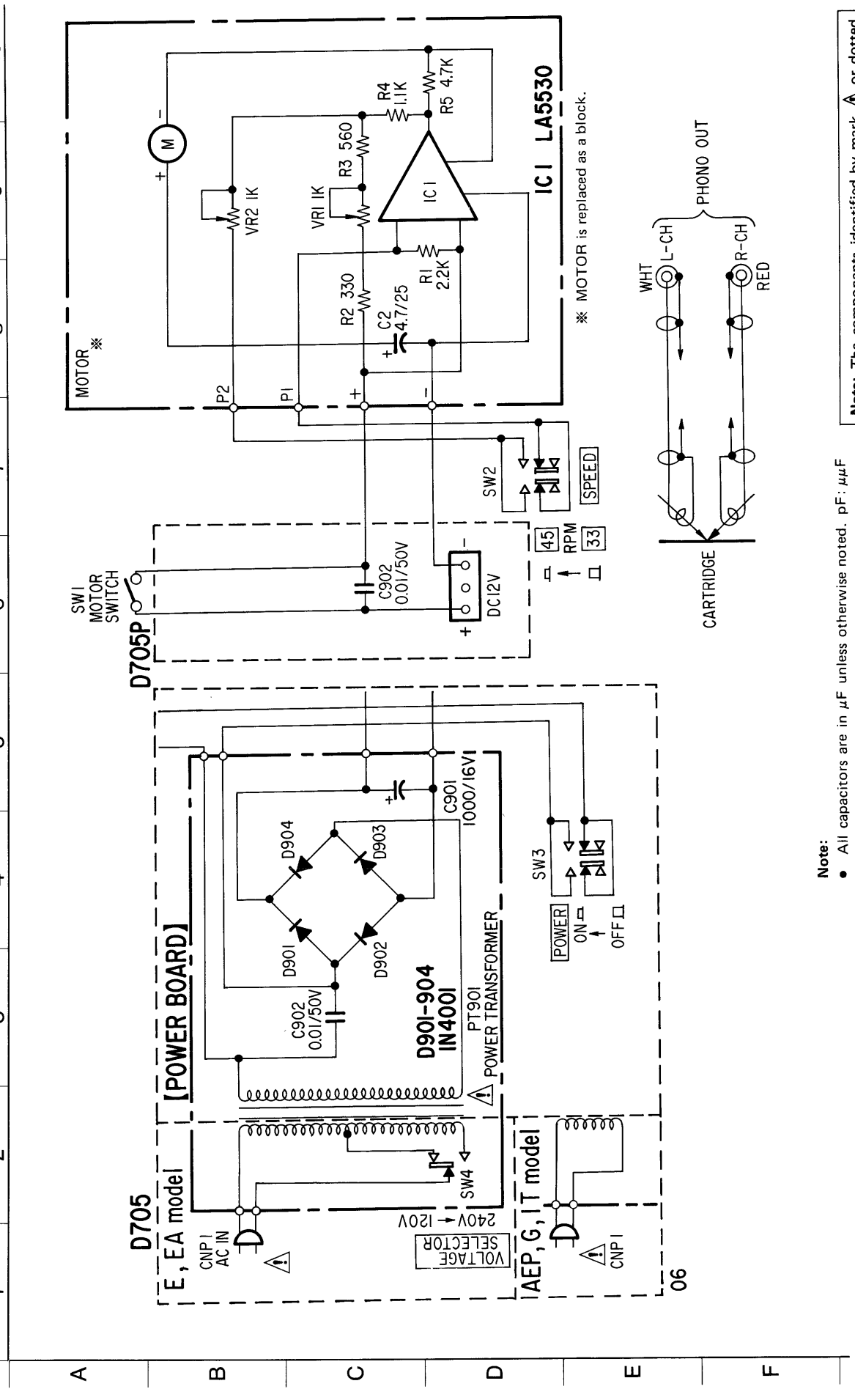


SECTION 2
DIAGRAMS

2-1. PRINTED WIRING BOARDS



2-2. SCHEMATIC DIAGRAM



Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

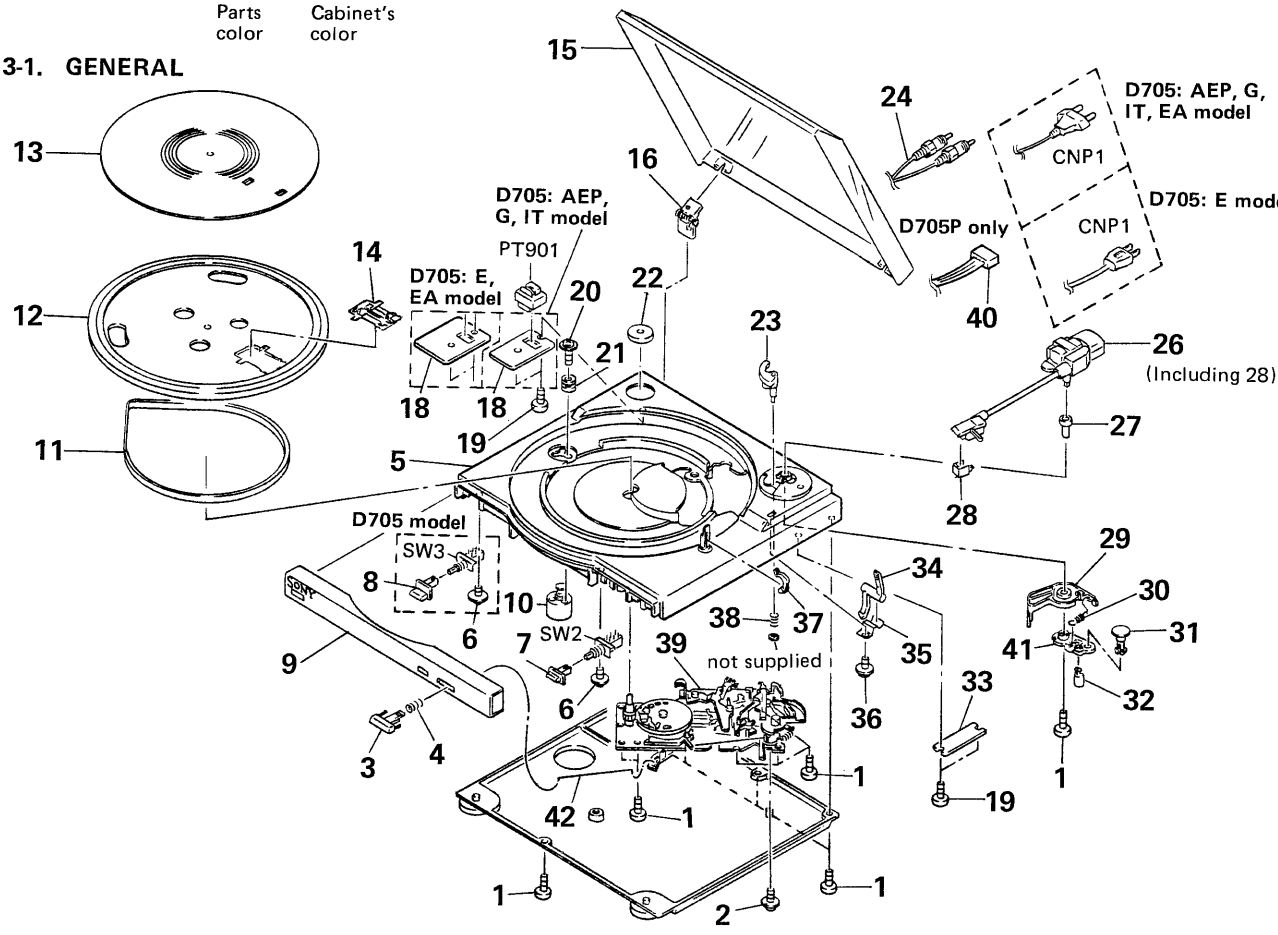
SECTION 3 EXPLODED VIEWS

NOTE:

- –XX, –X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Parts color ↑ Cabinet's color
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

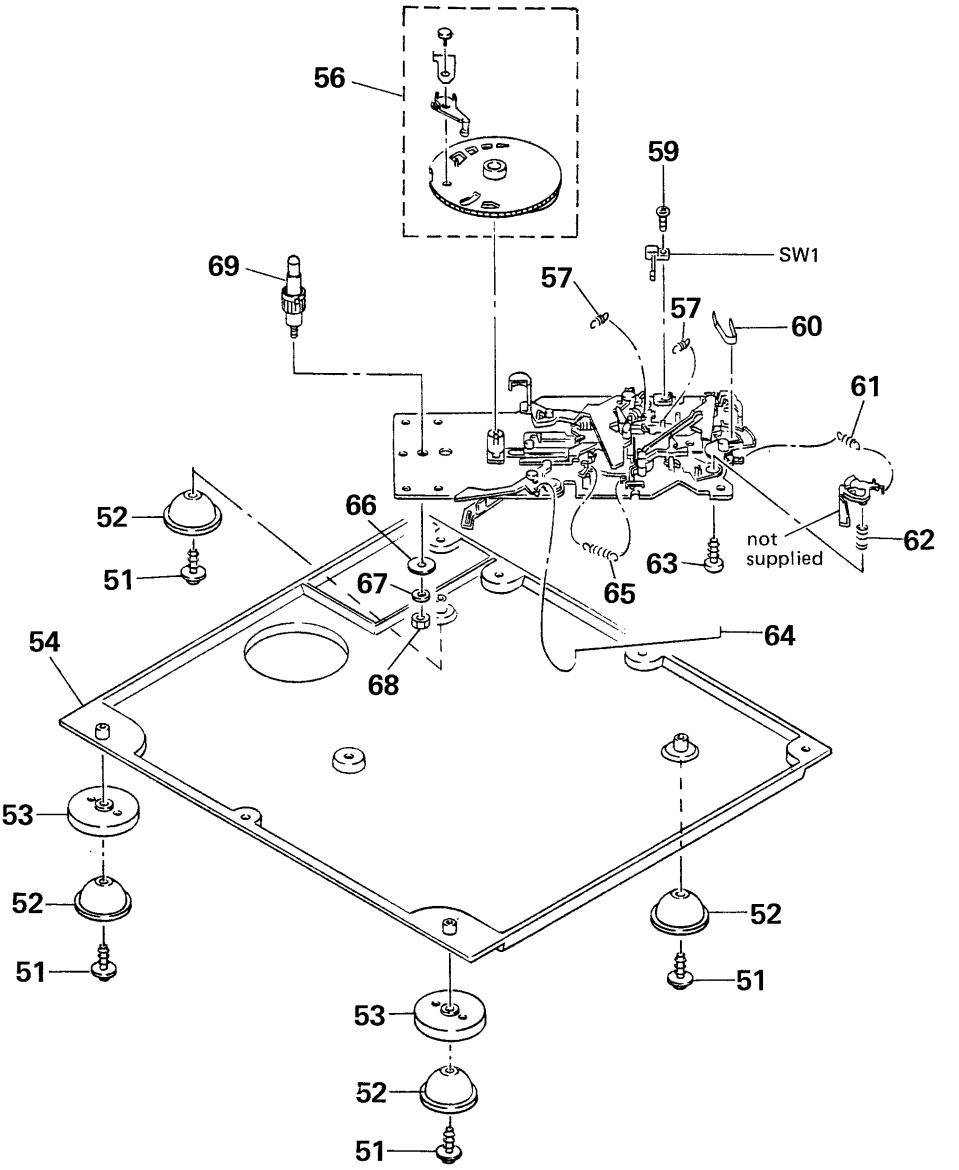
3-1. GENERAL



Ref. No.	Part No.	Description	Remark
1	4-946-233-01	SCREW #2, WPT 3X12Y	
2	4-946-234-01	SCREW #2, WPT 3X10X12Y	
3	4-944-680-01	BUTTON, START STOP	
4	4-944-686-01	SPRING, RETURN	
5	* 4-944-678-01	CABINET, UPPER	
7	4-944-683-01	BUTTON, SPEED	
8	4-944-681-01	BUTTON, POWER	
9	A-4604-887-A	FRONT PANEL (P-G) ASSY (D705P)	
9	A-4604-888-A	FRONT PANEL (B) ASSY (BLACK) (D705: IT, E)	
9	A-4325-129-A	FRONT PANEL (G) ASSY (GRAY) (D705: AEP, G, E, EA)	
10	1-541-872-11	MOTOR, DC (WITH PULLEY)	
11	4-944-743-01	BELT	
12	4-944-744-01	PLATER	
14	A-4325-130-A	SENSOR ASSY	
15	A-4604-844-A	COVER ASSY, DUST	
16	4-944-691-01	HINGE	
18	* 1-639-236-11	POWER BOARD (D705: AEP, G, IT)	
18	* 1-639-239-11	POWER BOARD (D705, E, EA)	
19	4-944-729-01	SCREW	
20	4-944-694-01	SCREW, SETTING MOTOR	
21	4-944-692-01	CUSHION, MOTOR	
22	4-944-682-01	ADAPTOR, EP	

Ref. No.	Part No.	Description	Remark
23	4-944-675-01	ARM, ELEVATION	
24	1-551-294-00	CORD (PHONO)	
26	A-4604-840-A	ARM ASSY, TONE	
27	* 4-944-672-01	BUSHING, TONE ARM	
28	4-944-756-01	CARTRIDGE	
29	4-944-704-01	ARM (B), FEED	
30	4-944-705-01	SPRING, FEED ARM	
31	4-944-759-01	ADJUSTMENT, CAM LEAD IN	
32	4-944-760-01	ADJUSTMENT, CAM LEAD AUTORETURN	
33	* 1-639-237-11	PC BOARD, PHONO	
34	4-944-674-01	LEVER, CUING	
35	* 4-944-685-01	BRACKET, CUING	
36	4-944-695-01	SCREW	
37	4-944-673-01	LOCKER, ARM	
38	4-944-687-01	SPRING, ELEVATION	
39	* A-4604-842-A	MECHANICAL ASSY, BASE	
40	1-590-871-11	CORD (WITH CONNECTOR) 3P (D705P)	
41	4-944-703-01	ARM (A), FEED	
42	4-944-688-01	LINK, START CUT	
CNP1 ⚠	1-555-750-00	CORD, POWER (D705: AEP, G, IT, EA)	
CNP1 ⚠	1-551-188-XX	CORD, POWER (D705: E)	
PT901 ⚠	1-450-508-11	TRANSFORMER, POWER (D705)	
SW2	1-572-744-11	SWITCH, PUSH (SPEED)	
SW3	1-572-744-11	SWITCH, PUSH (POWER) (D705)	

3-2. MD SECTION



Ref. No.	Part No.	Description	Remark
51	4-946-234-01	SCREW #2, WPT 3X10X12Y	
52	4-944-693-01	RUBBER, FOOT	
53	4-944-679-01	COVER, FOOT	
54	* 4-944-684-01	COVER, BOTTOM	
56	A-4325-128-A	RING GEAR ASSY	
57	* 4-944-725-01	SPRING, SWITCH	
59	4-944-728-01	SCREW	
60	* 4-944-726-01	BRACKET, LOCKER	
61	4-944-723-01	SPRING, CONTROL	
62	4-944-722-01	SPRING, CUING CAM	
64	4-944-727-01	LINK, REJECT	
65	4-944-724-01	SPRING, MECHANICAL	
66	4-944-731-01	WASHER, RAIN	
67	4-944-732-01	WASHER, SPRING	
68	4-944-730-01	NUT	
69	A-4604-892-A	CENTER SHAFT ASSY	
SW1	1-572-746-11	SWITCH, LEAF	

POWER

SECTION 4
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- –XX, –X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF: μF
- COILS
  uH: μH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
*	1-639-236-11	POWER BOARD			
		**********			
		< CAPACITOR >			
C901	1-124-360-00	ELECT	1000uF	20% 16V	
C902	1-136-153-00	FILM	0.01uF	50V	
		< DIODE >			
D901	8-719-200-02	DIODE 10E2			
D902	8-719-200-02	DIODE 10E2			
D903	8-719-200-02	DIODE 10E2			
D904	8-719-200-02	DIODE 10E2			
		< SWITCH >			
SW4 ⚠	1-572-745-11	SELECTOR, POWER (D705:E)			
		< TRANSFORMER >			
PT901 ⚠	1-450-508-11	TRANSFORMER, POWER (D705)			
**********					
		MISCELLANEOUS			
		**********			
10	1-541-872-11	MOTOR, DC (WITH PULLEY)			
18 *	1-639-239-11	POWER BOARD (D705, E, EA)			
24	1-551-294-00	CORD (PHONO)			
33 *	1-639-237-11	PC BOARD, PHONO			
40	1-590-871-11	CORD (WITH CONNECTOR) 3P (D705P)			
CNP1 ⚠	1-551-188-XX	CORD, POWER (D705:E)			
CNP1 ⚠	1-555-750-00	CORD, POWER (D705:AEP, G, IT, EA)			
SW1	1-572-746-11	SWITCH, LEAF			
SW2	1-572-744-11	SWITCH, PUSH (SPEED)			
SW3	1-572-744-11	SWITCH, PUSH (POWER) (D705)			

Ref. No.	Part No.	Description	Remark
		ACCESSORY & PACKING MATERIAL	
		**********	
	3-753-056-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (D705:AEP, E, EA)	
	3-753-056-41	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (D705:AEP)	
*	4-944-747-01	CARTON (D705:AEP)	
*	4-944-751-01	CARTON (D705P:UK)	
*	4-944-752-01	CARTON (D705/D705P:E)	
*	4-944-753-01	CARTON (D705:G, EA)	
*	4-944-754-01	CARTON (D705:IT)	
*	4-944-749-01	CUSHION (FRONT)	
*	4-944-750-01	CUSHION (REAR)	

9-956-352-11

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Audio Group

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PS-D705/D705P

SONY
SERVICE MANUAL

AEP Model
E Model
PS-D705

E Model
UK Model
PS-D705P

CORRECTION-1

Correct your service manual as shown below.

☛ : **indicates corrected portion.**

Page	INCORRECT			CORRECT	
	No.	Part No.	Discription	Part No.	Discription
6	13			4-950-309-01	SEET, RUBBER

9-956-352-91

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SS-A505

SERVICE MANUAL

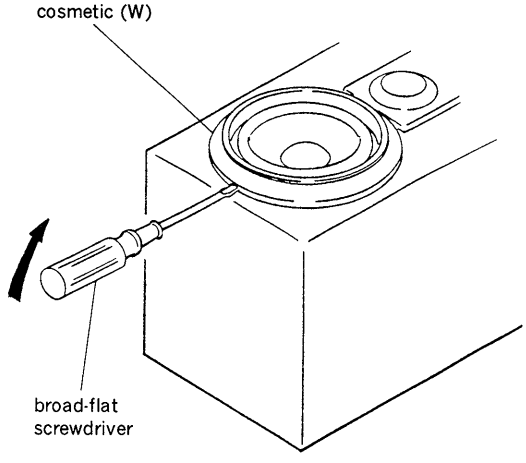
AEP Model
UK Model

SPECIFICATIONS

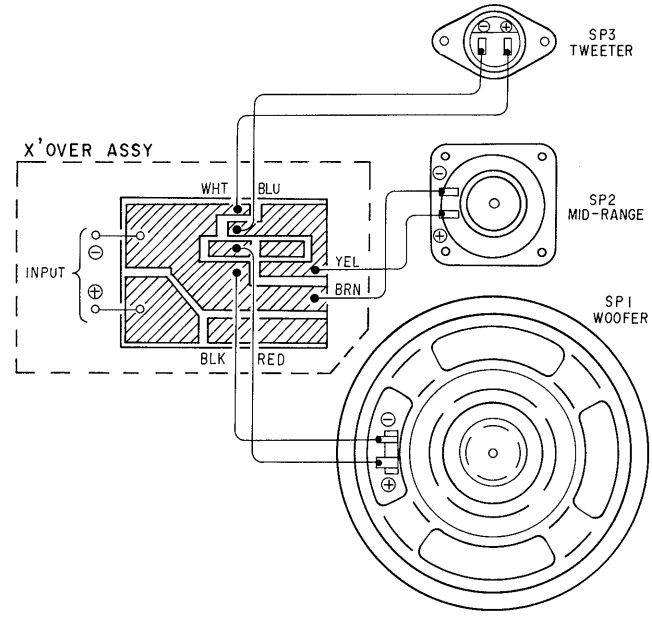
Speaker system	3-way
Speaker units	Woofer : 16cm
	Mid-range: 6.5cm cone type
	Tweeter : 1.6cm
Power handling capacity	
	Maximum input power 100W
Sensitivity	88dB/W/m
Frequency range	45-20,000 Hz
Rated impedance	6 ohms
Dimensions	Approx. 260x451x220mm(w/h/d)
Weight	Approx. 5.2 kg

Design and specifications subject to change without notice.

1. COSMETIC (W) REMOVAL



2. WIRING DIAGRAM



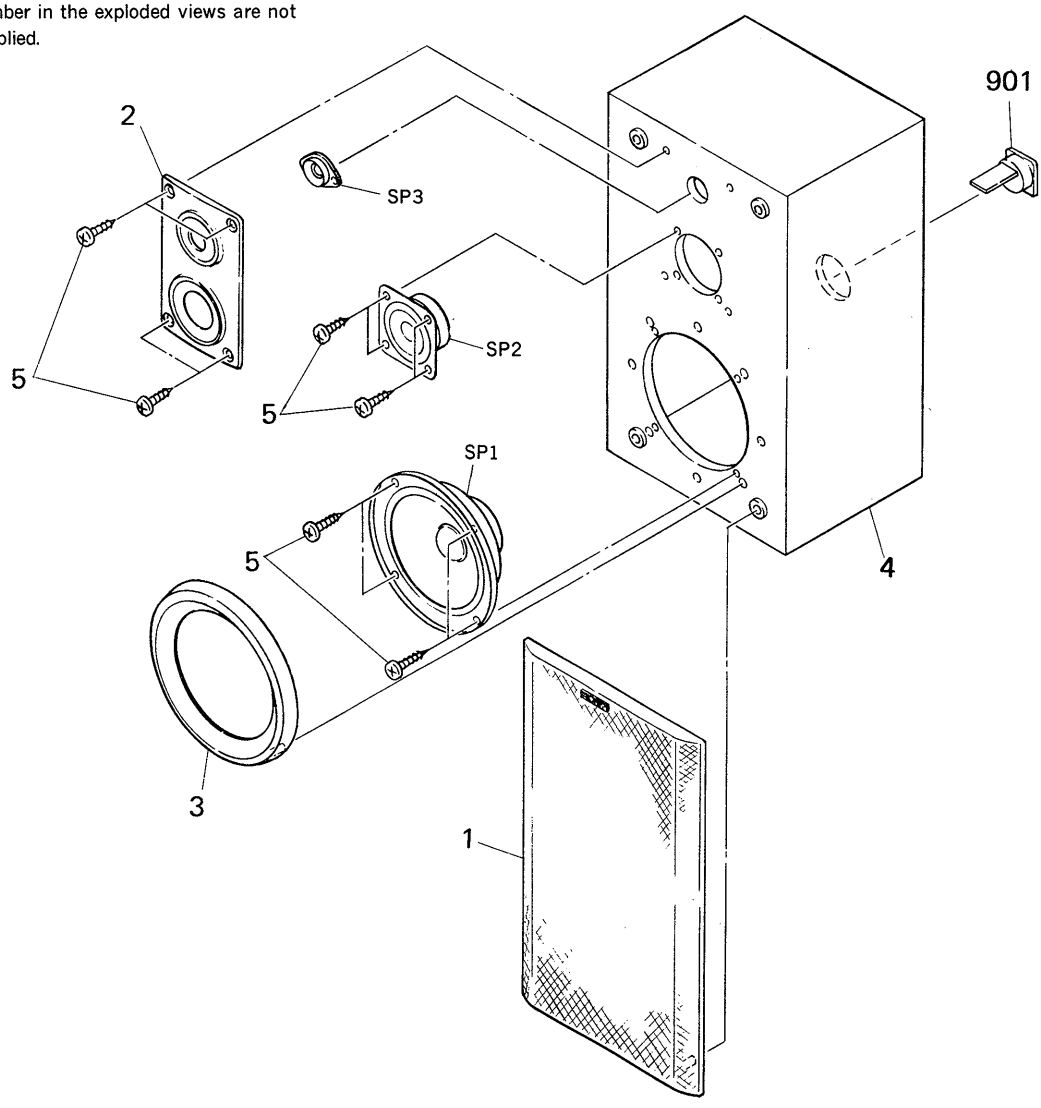
SPEAKER SYSTEM

SONY®

3. EXPLODED VIEW AND PARTS LIST

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.



No.	Part No.	Description
1	T-8150-398-A	FRAME ASSY, GRILLE
2	T-8151-270-1	COSMETIC (TW)
3	T-8151-269-1	COSMETIC (W)
4	T-8150-395-A	SPEAKER BOX ASSY
5	T-8150-573-1	TAPPING SCREW +P 4X15

ELECTRICAL PARTS

No.	Part No.	Description
901	T-8150-386-A	X'OVER ASSY
SP1	T-8110-476-1	WOOFER
SP2	T-8110-473-1	MID-RANGE
SP3	1-544-135-11	TWEETER

ACCESSORY & PACKING MATERIAL

	T-8151-351-1	MANUAL, INSTRUCTION
	T-8110-521-1	CORD, SPEAKER

9-956-398-11

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English
91D0458-1
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